



was destined to the same and died in the night of the following. The woman who engaged to wait upon this formed the last offices, and the laying her out, &c. at a o'clock on the Sunday morning duties required towards the scarcely terminated, before ability arose, that another this appalling disease was kind. The nurse sickened of cholera followed in rapid and increased violence. The attendants visited her but the powers of vitality sinking under the aggravated sufferings, and a state of collapse rapidly approaching. She died twenty hours from the commencement of the attack. The order in which these unfortunate occurred. I do not narrate being determinate on the cholera contagion, but as which, among others in the neighbourhood, afford sufficient the propriety of pausing to assert, or consider for general non-communicability of cholera.

THOMAS H.

Derby, Oct. 16.

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#### BOOKS.

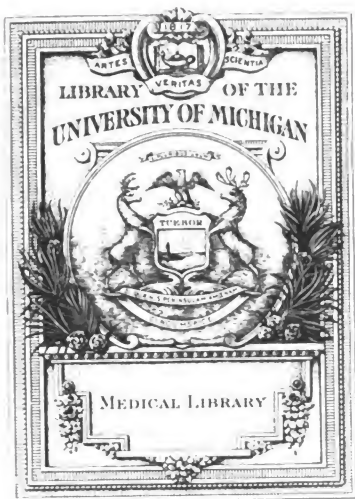
On the Influence of Physical A  
By W. F. Edwards, M.D. F.R.S.  
the Royal Academy of Science  
Academy of Medicine, of Paris.  
lated from the French, by Dr.  
Dr. Fisher; to which are added,  
some Observations on Electricity  
Edward Poulet and Luke Howard

On Absorption, and the Uses of  
By Dr. Hodgkin.

On the Microscopic Character  
mal Tissues and Fluids. By J. L.  
and Dr. Hodgkin; and some  
Work of Dr. Edwards. 8vo. pp.  
don, 1832. Highley.

A Practical Treatise on Cholera,  
in various Parts of the Metropolis  
under Tweeche, M.R.C.S., resi  
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THE  
LONDON  
MEDICAL AND SURGICAL  
JOURNAL;

EXHIBITING  
*A VIEW OF THE IMPROVEMENTS AND DISCOVERIES*  
IN THE  
VARIOUS BRANCHES OF MEDICAL SCIENCE.

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EDITED BY  
MICHAEL RYAN, M.D.  
MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS IN LONDON, &c. &c.  
AND  
AN ASSOCIATION OF PHYSICIANS AND SURGEONS.

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Quærerere verum.—HORACE.

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VOL. II.

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LONDON:  
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THE

# London Medical and Surgical Journal

No. 27.

SATURDAY, AUGUST 4, 1832.

VOL. II.

SELECTIONS  
FROM THE  
CLINICAL LECTURES,  
DELIVERED AT THE  
HOTEL-DIEU IN PARIS,

*During the Session of 1831 - 32;*

BY BARON DUPUYTREN,  
PRINCIPAL SURGEON OF THAT HOSPITAL.

*Nervous Delirium.*

An operation is skilfully performed; the assistants are astonished at the dexterity of the surgeon, and nevertheless the most serious accidents may threaten the life of the patient. Sometimes violent inflammation may take place either on the limb operated on, or on some internal organ, and carry off the patient at the moment when we were expecting complete success; at other times purulent absorption may occur, announcing itself by rigors and an erratic fever, the cause of which is almost always beyond the resources of art; at other times, the irritated nervous system may give rise to painful spasms, which often degenerate into fatal tetanus; or finally, the brain, disturbed by pain, fear, or even joy, receives sensations which are no longer in relation with surrounding objects, and reason abandons its empire at the moment when its assistance is most necessary. It is to the latter class of affections that I wish to draw your attention at present. Obscure in its causes, variable in its progress, frightful in its symptoms, *nervous delirium* is nevertheless seldom fatal, when it is put early under proper treatment.

Before entering into the proper consideration of this disorder, I shall narrate some cases of this unpleasant complication of wounds and operations, in order that you may be able to form a more certain and complete idea concerning it.

*Case the first.*—On the 5th of December, 1831, a man was brought to the Hôtel-Dieu, who, having quarrelled in a coffee-house, had had his leg fractured. The upper extremity of the fractured bone had torn the soft parts, and had made a triangular opening in the skin. The fracture was reduced, but the whole night long he uttered dreadful cries, and the next day, at the time of the visit, he appeared as if in a state of intoxication; while the limb was being dressed, he again uttered piercing cries. I remarked that this want of courage or excessive sensibility of the patient was a most unpleasant circumstance, inasmuch as serious accidents very frequently occurred under its influence. He was bled three times successively; the next day he appeared to be rather better, but on the third delirium set in; his ideas were incoherent and confused. It was the day when the friends of the patients are allowed to see them; they then almost always receive food which has been forbidden them, or suffer contradictions, and we therefore frequently find them worse in the evening, or the following night. Was the change which took place in this patient owing to such a cause, or to any other? I learned that his whole attention was taken up with an affair of considerable interest, and that he had suffered a severe disappointment; in fact, he ceased not repeating, during his delirium, that his remaining in the hospital was ruining him. He was ordered leeches, a sedative draught, and an assafetida enema. All these measures were unavailing, and on the 9th in the morning the patient died.

The death of this individual gave rise to many important questions. Did he fall a victim to one of those internal inflammations which frequently declare themselves only by fever or delirium? Did he die from the effects of the fracture, or from a severe shock to the nervous system?

On the other hand, the magistracy soon became acquainted with the affair, and they required me to solve this question, to ascertain whether the fracture was the effect of

the fall of the individual during the struggle in which he was engaged, or whether it had been directly caused by kicks received on the leg?

At the autopsy, which took place the next day, I observed that it was difficult to conceive how a man could cause such a fracture by merely falling down, and that in the present case the thing did not appear to be probable, and that if it were not absolutely impossible, at least it would require the concurrence of certain circumstances, which I could not even appreciate. On the other hand, such a fracture might be produced by a variety of causes, such as a fall down a flight of stairs, the passing of a coach-wheel over the limb, &c., so that you can conceive that it is impossible to decide in what manner it happened, and this may be a lesson to you, warning you how careful you ought to be in courts of justice. The examination of the fractured limb showed that the parts had been violently broken; the tibia was separated into many fragments; the fibula was fractured, the soft parts contused and torn; the pleura on the left side contained rather a large quantity of blood. The brain was healthy.

*Case the 2nd.*—M. R. C., a merchant, 25 years of age, of a nervous, lymphatic temperament, and of slight moral energy, was operated on for a very large sarcocele. Being in constant dread of hæmorrhage, he was much disturbed the day following the operation, and his natural indocility was increased. The day after, his agitation was greater; the slightest motion, gesture, word, or sensation, redoubled his alarm. Nevertheless all was going on well; but he soon began to complain of pain in the limbs, in the chest; his eyes became animated; he breathed hurriedly; he demanded food, and was desirous of getting up. He began to wander, he repelled his assistants, and called loudly for his friends, who were at a great distance; his whole body was in action; his cries, his brilliant eyes with motionless pupil, his face covered with perspiration, and the pulse calm and regular in the midst of this disorder, indicated an attack of nervous delirium. The patient complained of most severe pain in the chest, but the most attentive examination could not discover any lesion. I therefore directed the treatment which I have frequently employed with great success in such cases, namely, a demi-lavement containing six drops of laudanum, which was given immediately; some friends were dismissed, and he was directed to be left quite alone. In an hour he ceased speaking and fell asleep; when he awoke the next day he was perfectly sane. The cure was complete in twenty-five days.

*Case the 3rd.*—Langlois, a mason, 26 years of age, was admitted into the Hôtel-Dieu, in the month of May, for a fractured rib. A body-bandage was applied tightly, in order to insure immobility of the chest, a condition

necessary to effect a cure. Owing to the facility with which these sorts of fractures are cured, but little attention was paid him; but on the third day he was attacked by a continual delirium. He was in a state of extreme agitation; all the muscles in continued tension; the eyes brilliant, the skin covered with perspiration; the pulse alone was quiet. Langlois incessantly thought he saw objects flying in the air; he imagined that physical experiments were being performed on his bed, and that all the other patients in the ward were undergoing the same. This idea agitated him extremely; he feared its effects, and knew not whether he should remain, or endeavour to avoid it. This man, who was of a sanguineous temperament, was bled at first, but without relief; a glyster, with ten drops of laudanum, was then given, with slight advantage; the next day the dose was doubled, without further advantage. His cries disturbing the other patients, and the visiting, &c. in the ward rendering him more uneasy, he was removed to a place where he would be alone. The dose of laudanum was now carried to forty drops, and this time with effect—the delirium ceased.

It may easily be conceived, how very dangerous an agitation continued for so long a period was to this man, in a case in which repose and quiet only are efficacious remedies. The pleura, irritated by the asperities of the fractured rib, inflamed; the lung became diseased; the cough and sanguinolent expectoration proved that we had to do with a severe peripneumonia, which was the more dangerous because the cause which produced it was in action at every fit of coughing. He was treated by bleedings, demulcent drinks, and revulsives. He appeared to be cured, but the convalescence was not real; he became pale, and his strength did not return. He coughed frequently, had oppression at the chest, and fever, and when he left the hospital, after two months stay, he appeared to be suffering from chronic pneumonia.

*Case the 4th.*—Vincent François, 32 years of age, chasseur in the third regiment of the royal guards, of a bilious, nervous temperament, having determined to destroy himself, made himself drunk, went into the church of Notre Dame, and cut his throat. He was immediately brought to the Hôtel-Dieu. The skin was divided from one angle of the jaw to the other; anteriorly some muscles had been divided, and the instrument had penetrated even into the pharynx, between the os hyoides and the thyroid cartilage. The wound was dressed, and the patient carefully watched. The second day he became delirious, but not on any particular point; he was restrained with a strait-waistcoat, and had a sedative draught, with half an ounce of syrup of diacodium, with however but little effect. Reason was restored after a time, but the efforts which he had made during the

previous twenty-four hours had caused serious symptoms to arise. He suffered from burning heat, and a feeling of strangulation; he was besides troubled with a violent cough, accompanied with puriform expectoration. On the fourth day the wound put on an unhealthy appearance, and on the seventh the delirium returned. It was successfully combated by the same measures. From these occurrences, and some others, there was great reason to fear for the life of this man, who nevertheless recovered after fifty days treatment.

*Case the 5th.*—L—— le N——, 35 years of age, hair-dresser, residing in the Rue St. Antoine, having dissipated a considerable sum in a short time, which he had amassed with great labour, abandoned himself to extreme grief. The loss of his place in the house where he worked added sensibly to his despair, and in a moment of fury he gave himself seven blows with a pair of scissors, three of which appeared to have penetrated deeper than the others. He was taken immediately to the Hôtel-Dieu, where he was bled, and had a sedative draught with laudanum; the delirium was not relieved. The second day he was bled again without benefit; he thought himself pursued by the police, and endeavoured to evade them; it was necessary to secure him. In spite of this state of agitation the pulse was not frequent, the tongue was clean; the body covered with an abundant perspiration, the appetite good; but Le N—— would not eat, being always pursued by his dread of the police. For two days he remained in this state, although he had been bled again twice, and had had antispasmodics.

On the fifth day I ordered him two enemata, with the addition of ten drops of laudanum in each. Scarcely had this measure been employed than the delirium lessened, and at the end of six days it entirely disappeared, by means of glysters.

Fifteen days afterwards Le N—— returned again to the Hôtel-Dieu, in consequence of a second attempt at suicide. The number of scissor-wounds was so great, that they resembled the punctures made by scarifications. Nervous delirium again took place, was again treated, and again cured by the use of laudanum in enemata.

*Case the 6th.*—Marianne R——, at the age of 58, found her sight gradually becoming weaker; at 61 she could only distinguish light from darkness. When received in the Hôtel-Dieu she presented a complete opacity of the crystalline lens. All circumstances being favourable for the operation, that of keratonyxis was performed, after fourteen days preparatory treatment.

During that day frequent vomiting occurred, which diminished under the influence of antispasmodic draughts, and ceased entirely the next day. On the third day she complained of cephalalgia, and discharge of scald-

ing tears; four pediluvia, two enemata. On the following days intense inflammation of the eyes and eyelids set in. One portion of cataract rose again behind the pupil of the right eye, and formed there an opaque half-moon; in the left eye the pupil appeared square, and behind it pieces of the crystalline lens and its membrane could be seen of an intense red, other parts of the same body being in the anterior chamber; the patient cannot see; pain very severe. She was ordered a seton in the nape of the neck.

During the night of the 15th intense nervous delirium set in, and the strait-waistcoat was required. The next day she could recognize those who were around her, but complained of pretended ill-treatment which she had received, and answered all questions wrong (antispasmodics, sinapisms to the legs); no improvement. On the 17th day, the fourth part of an ordinary clyster, with eight drops of laudanum were given; at night somnolency. On the 18th, delirium again supervened; the lavement with ten drops of laudanum was administered; and on the 19th the delirium disappeared, and did not again return.

This terminates all that has relation to the present subject; but I may add that, notwithstanding all that happened, the patient left the hospital in a most satisfactory state.

*Case the 7th.*—Etienne M——, aged 54, when in a state of intoxication, endeavouring to descend some steps, fell down on his left side. He could not raise himself, and was forthwith carried to the Hôtel-Dieu, where the house-surgeon in waiting discovered all the symptoms of a fracture of the lower extremity of the fibula, with rupture of the malleolus internus at its base. The limb was placed in the ordinary bandage for fractures of the leg; extreme pain, and tumefaction around the articulation came on. The next day I applied my apparatus, and resolving applications. On the third day the pain ceased, and the swelling was lessened. On the fourth violent delirium, requiring the strait-waistcoat; the fourth of an ordinary enema, with eight or ten drops of laudanum; the delirium had disappeared by the next day, when it was judged unnecessary to continue the use of the medicine. On the sixth it returned again, and persisted until the eighth, when it yielded to the same glysters, and did not again return.

This complication did not retard the cure of the fracture, in spite of the motions of the patient. At the end of thirty-six days the consolidation of the fracture was perfect, and the limb was not in the least deformed.

These particular facts naturally lead us to the history of this complication of fractures and operations, which I have termed *nervous*, or, according to the cause which produces it, *traumatic delirium*.

It sometimes commences by strange gestures, inordinate actions, and incoherent

discourse; but it most frequently takes place in a sudden and unexpected manner, in individuals placed even in the most favourable circumstances; a singular confusion of ideas then occurs with them, in regard to places, persons, and things. Subject to continued insomnia, the patient has commonly one or more ruling ideas, which are almost always in relation with the profession, passions, tastes, age, and sex. He gives himself up to continual jactitation; the upper parts of the body are covered with an abundant perspiration; the eyes are brilliant and injected; the face animated; and he makes use of threatening words, and frightening vociferations, with amazing loquacity. Insensibility in such cases is often so great, that patients with comminuted fractures of the lower extremities, have been known to pull off the dressings, and walk about on the injured limb, without appearing to suffer any pain; others, with fractured ribs, are in continual agitation and singing, without apparent suffering; and others, who have been operated on for hernia, introduce their fingers into the wound, and coolly amuse themselves with unrolling their intestines, as if it were on dead bodies.

In spite of the severity of these symptoms, the pulse tranquil and quiet, is no otherwise changed than by the inordinate actions; there is not any fever; the excremental functions are executed with their accustomed regularity; but there is no appetite, and at the end of two, four, or five days, this affection terminates in death, but much more frequently a cure is effected. If a happy termination is on the point of taking place, the patient becomes calm without any apparent crisis, and as suddenly as the disorder commenced. Worn out with fatigue, the patient falls into deep and peaceful sleep, and, at the end of ten or fifteen hours at the utmost, he awakes in full possession of his reason, without any recollection of what has past, weak and sensible of pain; the appetite returns, and the primitive disease again takes its course. The individual being constantly weaker at each relapse, this delirium may recur two or three times, after one or more days of remission.

The most remarkable symptom in the midst of this disorder is the quiet state of the circulation, and the absence of all febrile excitement. You see an individual furious, out of his mind, the perspiration pouring down his face, his eyes shining, his cries heard at a distance, you see him apparently suffering from most intense frenzy; you approach him; his pulse is quiet, regular, and the state of the skin precludes all suspicion of internal inflammation. It is real mania, differing from it only by its duration; it is rarely prolonged beyond the fifth or sixth day.

Nervous individuals, of a pusillanimous disposition, those whose minds have been shaken by a strong and rapidly conceived re-

solution, are the most subject to this disorder. Thus it is very frequent among suicides, so much so, that some persons pretend it is peculiar to them. Athletic individuals are not exempt from it. Women are less subject to it, and it has not been observed in children.

Nervous delirium may become very dangerous by itself. I have seen a young man of a strong constitution, in whom it occurred consequent on a slight injury to one of the toes, fall a victim to it in eight and forty hours, without the primitive affection appearing to exercise any sinister influence. In the great majority of cases, however, the severity of the delirium is to be appreciated by that of the diseases which it accompanies. Thus a fatal termination is rather to be expected when it appears consequent on a fracture of one of the limbs, or of the chest, or after a severe wound in the throat, than when it succeeds a simple wound, which is not at all dangerous in itself.

An examination of the body does not discover, either in the cerebro-spinal system, or in any other organ, any material lesion which can account for the disorders which took place during life, and which can supply a sufficient reason for the fatal termination.

Sedatives of all kinds and in all forms, bleeding pushed to syncope, revulsives, and all other measures which I have seen employed, and have myself made use of for a long time, have always appeared to me to be inefficacious in this disease, the progress of which they did not change, and the severity of which they did not mitigate. Narcotics, the liquid laudanum of Sydenham, taken into the stomach, do not produce more advantageous effects. This want of action may be easily explained by physiological reasoning. The stomach, destined to elaborate the first element of nutrition, is endowed with the power of digestion, and contains juices which change more or less the substances with which they are brought in contact; many medicines introduced into the stomach are without effect, because they get mixed with the food; this is the reason why there is such a great number, especially among the vegetables, the action of which is so uncertain, and often null in a multitude of cases.

The inutility of these various agents, and the knowledge of the modifications that medicines undergo in the stomach, have induced me to make use of a measure which has constantly succeeded, and which appears to me to be almost specific; this measure, as simple as it is energetic, is merely a lavement containing a few drops of laudanum. Five or six drops in the fourth part of an ordinary enema have greater influence than triple the quantity introduced into the stomach. The reason I have already stated, but it may also be added, that the rectum, destined to be the reservoir of the residue of digestion, absorbs, but does not digest, and hence you may readily conceive that when medicines are inject-

ed into the passage, if they are not expelled, they are more likely to reach their destination. These enemata should be repeated every six hours for two, three, or four times. When they are retained, they are sufficient to remove the most furious delirium.

## A CLINICAL LECTURE

ON A CASE OF

### SECONDARY HÆMORRHAGE,

*In which the external Iliac, Inguinal, and Femoral Arteries were tied.*

DELIVERED BY

M. S. BUCHANAN, M.D.

*One of the Surgeons to the Glasgow Royal Infirmary.*

GENTLEMEN,

THE subject which is uppermost in the minds of all now hearing me, I feel convinced is that of hæmorrhage, as remarked in the case of the little boy, Witherspoon, in ward No. 12. Many other cases have been admitted into these surgical wards, of great importance, within the last month, but the one above referred to has so much engrossed your attention, and so completely absorbed your every feeling, that I have determined to pass over the subject of erysipelas, which I intended to bring before you, in order to make room for this unparalleled and very interesting case. On his admission, the 25th of January, the whole of the right and left inguinal and iliac regions, with that of the hypogastrium from root of penis to within a few lines of umbilicus, was one immense mass of ulceration, of a florid healthy appearance, and covered with thick benign pus. On removal of this with a soft sponge, the granulations were every where observed to be exuberant, except in the left groin, at which spot the ulcerative process seemed to have dipped deeper than any where else, was of a soft flabby feel, of a dark grey appearance, and in a state approaching to gangrene.

His health was greatly impaired, and much emaciation had taken place. Pulse 140, weak, and easily compressed; thirst urgent; no sleep on account of dry troublesome cough. His countenance was sharp and anxious; tongue dry and white; skin hot; in short, hectic in its worst form was remarked. To these symptoms were superadded bed sores, and extensive bruising on sacrum and dorsum of ilium. All the above mischief had been caused by this little boy of 12 years old, having fallen, on the 15th instant, from a railway waggon, while in its headlong course, the wheels of which had pushed his body onwards before it to the centre of the track. That this was the manner in which the injury was sustained, appeared, not only from the account

of the intelligent little sufferer himself, but also from a very casual inspection of the waggon and rail, with the superincumbent weight of coal, which the former contained. The consequence of this dreadful bruise of the upper part of thighs and lower part of belly, was mortification of the skin and subjacent tissues. About the tenth day after the injury these sloughs had all separated, and for a few days prior to admission, the sore had begun to assume the healthy appearance formerly alluded to. By an examination of the House Journal, you will find, that immediately on admission he had a liberal allowance of wine and quina; his diet was of the most nourishing kind; and his wound was dressed with finely carded cotton, the most pleasant, soothing, and sanative dressing in all such cases; and his cough was mitigated by a mucilaginous anodyne mixture. Under this treatment he continued rapidly to improve, as you will remark by referring to the Reports of the 27th, 29th, of January, and 1st of February. The ulceration daily contracted, pus in smaller quantity was discharged, hollow in left groin filled up, contusion of buttock and sacrum gave him less uneasiness, his cough was at the last of these dates reported to be nearly gone, his nights were refreshing and composed, no moaning; pulse firm; thirst abated; and appetite greatly improved; in short, he was decidedly convalescent, and to all appearance his perfect recovery seemed at no great distance. Early in the morning of the 2d February, (being eighteen days from the accident, hæmorrhage to an alarming extent took place during sleep, and before he awoke, and compression was applied, he had lost upwards of  $\text{ʒxxx}$ . of blood. Syncope then took place and a coagulum formed, which stopped further effusion. The bleeding was remarked to have occurred exactly over the femoral artery, which was felt distinctly pulsating under where clot had formed, and in the soft friable and sloughy spot mentioned in first part of case. For a boy of 12 years old, so much emaciated previously, and whose nervous system had been so much unhinged, to have lost  $\text{ʒxxx}$ . of blood, without death being the consequence, may appear somewhat incredible, and had I not seen the quantity and the soaking of the bed-clothes, I would have said there had been exaggeration, but here, as elsewhere, my object has been to stick to truth, and have no fear of after consequences.

Ten hours after the hæmorrhage, the report in the Journal bears, that he had again revived by the application of warmth to his extremities, and mulled wine at intervals, which he swallowed greedily. His moaning, however, had returned, and his cough had again become very troublesome.

You will find by a reference to the minute reports of the 3d, 4th, and 5th, that his strength continued rapidly to improve, his restlessness, moaning, and short cough gra-



dually disappeared, and his appetite became so keen that he entreated to be allowed full diet, which was in part complied with.

About 11 o'clock, in the evening of the 5th, arterial hæmorrhage again appeared from seat of femoral artery; a consultation was instantly called, and compression with the finger had recourse to. On my arrival at the Hospital, I made a minute examination of the wound, and observed the arterial stream to issue from a small aneurismal pouch about the size of a field bean, in the centre of the soft flabby ulcerated surface of left groin, and which with my finger I freely opened, but to my astonishment, hæmorrhage again ceased completely. By this time the members of consultation had arrived, but, in consequence of the extreme exhaustion produced by the hæmorrhage, they were of opinion that compression with the finger over the site of the above-mentioned pouch, should be again had recourse to, after which, if the boy revived, and hæmorrhage recurred, from what was by the minority thought the femoral artery, then the external iliac should be secured by ligature.

The quantity of blood by this hæmorrhage having amounted to about  $\text{lb.}$ , the extremities being cold, and the face of the little sufferer of a deadly pallid hue, with a fluttering and compressible pulse, I ordered him wine, *ad libitum*, and to be strictly watched, requesting the gentlemen of the consultation again to give me their assistance at the visit hour, 1 o'clock P.M. I ought to have stated, that the majority in consultation thought that it could not be the main trunk of the femoral which was ulcerated, but the epigastric, and if so, that tying the iliac would be of no use, from the free inoculation of the former with the external mammary, and the great risk besides of mortification of the limb, from the above operation, in such a subject. To the first part of this position, I felt inclined to subscribe on a former occasion, and for the reasons then urged; but on the present, my mind was made up as to the source of the hæmorrhage, and the consequent practice. I felt somewhat at a loss, however, to account for this bell-shaped pouch over the main trunk of the femoral, the ease with which the stream was arrested, and the length of time which had intervened since the previous flow. The only way in which I could explain this peculiarity in the case was, that nature in her effort to save life had, when the first hæmorrhage was arrested, spontaneously formed, between the coats of the vessel and the sheath, a layer of lymph,—that this becoming organized, constituted the bag alluded to, which being distended and ulcerating had burst, and after the application of the finger, that nature again was in the act of renewing her former manœuvre, to the astonishment of all her spectators.

At 1 P.M., of the 6th, matters had much improved, and you will find by the very ac-

curate, though lengthy report in the Journal of this date, after stating all the particulars of the case, that "no further hæmorrhage had occurred." The majority of the consultation were therefore of opinion, that nature should get, once more, a trial of her powers at plugging, prior to the dernier resort—the ligature of the artery. But I must say, that at this consultation there was a considerable difference of opinion, and I state this here, that all of you may know the facts of the case, and the arguments which were used, *pro* and *con*. as in my opinion, a knowledge of this consultation is of essential importance to the right understanding of all that afterwards occurred. In page 237 of Vol. III. of this Journal, in relating my case of ligature of the subclavian artery, you will find a *fac simile* of the case now under consideration; and the arguments there brought forward by the minority, were exactly of a similar kind to those advanced in the present case; namely, that hæmorrhage would undoubtedly again occur, and put it out of our power to proceed to an operation; and that the patient would never again have an equally good chance of surviving, nor an operation of being successful, as at the present moment.

In the evening of the 6th, he had considerably revived, and though he had taken nothing but his mulled wine, his pulse had improved, his countenance was lively, he had enjoyed some sound sleep, and was cheerful; his wine was continued, and 15 drops of tincture of digitalis ordered, to be repeated every fifth hour, and its effect to be watched. A little lunar caustic was applied to the flabby granulations around hæmorrhagic spot, and finely carded cotton as formerly to the whole of the ulcerated surface. With the exception of another hæmorrhagic drain on the 14th, little or no alteration took place from the 6th instant till the 19th, and you will find by a reference to the daily reports, that from the 19th, to the 26th, our patient improved in strength, hectic subsided, the discharge from lumbar abscess became smaller, his appetite improved—in short, he once more appeared convalescent.

I must here crave your attention to a few passing remarks on the history of this case, since the 14th, the date of last bleeding. I mentioned that at the consultation of the 5th, a kind of qualified permission was by the majority given, to throw a ligature round the external iliac artery, if hæmorrhage again occurred from the same spot. The qualification was, if the bleeding was distinctly observed to proceed from the trunk of the femoral artery. I need not inform any of you, how much opinions on this point changed, from the 5th, to the 14th, or in other words, how eight days of calm and convalescence strengthened the impression, that such a formidable operation was quite unnecessary, and also the opinion that a small arterial branch only had given away, which time and perhaps com-

pression would cicatrize. For this reason I did not proceed to the operation on the 14th, though much inclined, but rather preferred the sanction of another consultation to abiding by my own conviction, and notwithstanding the result of the consultation, as reported on the 15th, I still had the satisfaction of having done my duty. It may be said, that timidity rather than caution prompted me on this occasion, and I am free to confess that I had fearful forebodings on the result, for the reasons which shall hereafter be detailed; but a paramount feeling of duty to my patient, absorbed at this stage of the case, every other consideration. After the consultation of the 15th, however, I as it were resigned the case into other hands, and from this period ceased to look upon it as of the same interest, for I felt that no sooner had I made up my leeway by the exhibition of tonics and stimulants, than all must again be lost by another and a more fatal hæmorrhage. True it was, I could not positively affirm that it was the femoral artery, in consequence of the soft, friable and sloughy state of the wound—true it was, I could not very satisfactorily, or according to any of the known rules of surgical pathology, explain the meaning of such long intervals of hæmorrhagic repose, or the process by which, so frequently, nature, in this remarkable case, formed for herself a plug, in so large an arterial conduit; still, I was not singular in this opinion, founded as it was on the observation of nature's resources in aneurismal cases, and as the result will show you, I had the misfortune to be right—but you observe, with what difficulties I had to grapple, and against what odds I had at every step to contend. The application of lunar caustic, and the finger to the soft flabby granulations, merely to assist in forming a coating of lymph, over the hæmorrhagic spot, were resorted to, and prolonging the interval of repose, and from the success which had previously attended these efforts, I meant, (but for the event which I am by and by to detail,) to have continued them for some time longer.

When I undertook the charge of this hospital on the 1st of May last, little did I then think, that within a few hours after my incumbency, I should have been called upon to perform one of the most dangerous and difficult operations in the whole range of surgery, one which has for the first time been performed in this hospital, and the third time in Scotland—I mean the ligature of the subclavian artery; and as little did I imagine, that before my exit from office at the end of the session, I should be a second time called on to handle the knife in a case of such importance as that now under consideration: but so must every one of you very soon find, that the practice of our profession is full of hazard, and that these sudden and alarming cases are often the very first to arrest your attention. Hæmorrhage is at all times a most alarming symptom, but when it occurs from

the surface of a bleeding stump, a wounded or ulcerated artery, or an aneurismal pouch, the danger is so pressing, that no time is left for reflection, you must act—you must give that assistance, which in a few moments, if not afforded, may be of no avail. Are you then, I would ask, if placed in such difficulties, ready to show that your time in the dissecting-room has not been mispent, or your talents in the study have not been misapplied? Unless you can answer these questions satisfactorily—not at Surgeons' Hall, by dint of previous grinding—but at your patient's bedside, how fearful must one day be your responsibility—how tremendous your award.

The following is the report of the 26th:—  
 "At three o'clock this morning, arterial hæmorrhage again occurred from sloughy spot described in former reports, but was immediately commanded with the finger, and not above  $\frac{3}{4}$  of blood were lost. A consultation was called at six A.M. when compression having been removed, and wound minutely examined, an arterial gush instantly took place, apparently from femoral artery, exactly over the spot whence all previous hæmorrhages had issued, but it was at once arrested by my finger. Vessel and sheath at this spot seemed to be in a soft, friable state. Pulse firm, visage lively, and in other respects he expressed himself as pretty easy." The consultation, which consisted of Drs. M'Farlane, Weir, and Auchincloss, being unanimously of opinion that the external iliac artery should, without further delay, be secured by ligature, the operation was performed in the following manner:—I made an incision from the outer opening of inguinal canal, to about half an inch from anterior superior spine of ilium, about an inch above Poupart's ligament. This first incision was straight and carried through skin and cellular substance. The superficial fascia covering external oblique muscle was then divided upon the director through whole extent of wound, and the fibres of external and internal oblique were thereafter incised in a similar manner, exposing fascia transversalis and peritoneum. I now introduced my finger into wound, and with my nail detached with ease the peritoneum from sheath of external iliac artery, to the extent of about three-fourths of an inch, and having now passed the common aneurismal needle under it, from within outwards, armed with a single silk ligature, I secured the vessel by a double knot, carrying the ends on the points of my fore-fingers to the bottom of the wound, which was nearly an inch in depth. Pulsation and hæmorrhage were instantly arrested, and one end of ligature being allowed to remain, lips of wound were approximated by a stitch in centre, and adhesive plaster. He bore the operation well, and though it lasted about twenty minutes, not two ounces of blood were lost.

*Observations on Operation.*

Various have been the methods of tying the external iliac artery. Mr. Abernethy, my old master, who I think was the first who performed this operation, made his incision in a straight direction upwards. Sir A. Cooper carried his knife in a semilunar direction, with the convexity of the incision looking towards Poupart's ligament, one horn to the inguinal ring, the other to the anterior spine of the ilium. The method which I took differed from both, and for the following reasons:—

1st. From the permanent position in which the little patient lay on his back, with his thighs at a right angle to the pelvis, and soles of his feet resting on the mattress, thus rendering it impossible to handle the knife, except in a slanting direction.

2nd. In consequence of the information communicated to me, prior to the operation, by the boy himself, of hernia having occurred at the left inguinal opening in the neighbourhood of the wound, on the first occurrence of the accident, or, as he expressed it, "of the puddings having come out," at the spot from which the blood flowed. This circumstance, I must say, threw a damp over my mind, which was not removed until I found, on detaching the peritoneum with my finger from the fascia transversalis, that here my youthful patient had been deceived.

3rd. The rail waggon having passed against this part of the pelvis, had produced such inflammation and *condensation*, if I may so speak, of all the surrounding parts, that I could only discover the relative situation of Poupart's ligament by those great landmarks, the pubis and ilium, and to have made my incision in a lunated form, I must have dipped into the mass of ulceration which was caused by the separation of the sloughs. As matters stood I avoided this, kept close by the edge of the cicatrix, and was thus enabled to have a smooth surface and healthy parts to act upon in my after progress.

4th. By following this procedure, I expected to have a more complete command of the intestines, if I found, as was expected, that the peritoneum had previously suffered; unfortunately, however, a difficulty here stared me in the face, which had nigh capsize my coolness, and but for the able assistance of my friend, Dr. Weir, I would have found great difficulty in finishing my operation in the short time stated. This was the protrusion of the peritoneum into the wound, by the powerful efforts which the little patient made with his abdominal muscles, in the act of screaming; by the skilful use, however, of the silver speculum, which kept back the hernia while passing the aneurismal needle, I was enabled in a few moments to have all secure.

In all that I have above stated, you remark the difference which must ever exist between the ligature of such a blood vessel as the iliac, in a dissecting room upon the dead subject, or on a patient whose iliac region is in a sound or natural state, compared to that on the little boy under review; and this it is which stamps the living picture of such an injury and such an operation, with an impress which no time can ever obliterate. Before I give the reports subsequent to the operation, it may be of use to take a prospective glance at what nature could accomplish after our interference, by the ligature of the main trunk of supply to the limb. It was formerly objected that mortification would speedily take place, from the arrestment of the circulation in so bloodless and emaciated a patient, or that death might take place during, or immediately after, the operation. As to the second objection, I had, I must confess, some misgivings, from the facts which I have above so fully detailed; but with regard to the first, I had no fears. Indeed, as I told you afterwards in my observations in the ward, my foreboding was of a diametrically opposite character, namely, that nature, in her anxiety to restore her lost ground, would, by her efforts through all the collateral channels, soon—*too soon*—restore to the bloodless limb all its vitality, and all its circulation.

"27th, one o'clock.—When visited at ten o'clock last night, and at nine o'clock this morning, was fast asleep, and had taken since the operation, about ten ounces of wine and half an ounce of brandy; breakfasted with relish; adhesion of sides of wound above Poupart's ligament seems to have partially taken place; no abdominal tension or pain; both limbs of equal temperature, but pulsation in left cannot be felt either in femoral or popliteal arteries; bed sores and ulcerations look healthy; fistulous opening at superior and posterior part of ilium has much contracted, but fluctuation is observed between dorsum of ilium and left buttock. *Contin. Omnia.*"

"Feb. 28th. An excellent night, having slept uninterruptedly from eleven P.M. till four A.M. and occasionally afterwards during the morning. Pulse 120, and of good strength; tongue clean; skin cool; one natural stool; appetite improved; ulcerated surface continues to cicatrize; inguinal wound also looks healthy, and has secreted a small quantity of healthy pus; left limb of the same temperature as the opposite, but no pulsation as yet perceptible in femoral artery. *Quiescat.*"

"March 1st. Another good night; no complaints, except of pain of bed sores, and abscess on dorsum of ilium. Pulse 120, soft; functions natural; pulsation is now perceptible both in femoral and popliteal arteries. *Contin.*"

About seven o'clock on the morning of the 2d, hamorrhage again occurred from the

same spot, whence at every previous period it had been observed to issue, to the extent of about  $\frac{1}{2}$  inch only; the little patient himself, immediately on detecting it, having made compression with his own fingers, and called for assistance. Till the visit hour at one o'clock, the same means were resorted to, of steady compression over the bleeding spot, and the administration of cordials in limited quantity. When visited about half-past one o'clock, it was evident that collateral circulation had become completely re-established, directly through femoral artery upwards to inguinal, from the gush of arterial blood which had taken place at two different periods since seven o'clock, on attempting to remove the finger from the hæmorrhagic spot; and also from suppression of bleeding and pulsation, by compression of femoral artery, on the distal side of place whence blood issued. On this account, with the concurrence of my colleague, I proceeded to throw a ligature around the femoral artery at the place where compression arrested the reflux channel. For this purpose the patient was placed in the same position as in the operation of the 26th, the finger of my assistant during the performance of the operation being kept firmly applied over bleeding spot. I then made an incision about an inch and a half in length, in a slanting direction, from border of fascia lata, towards inner side of sartorius muscle through skin and cellular substance. Femoral fascia was now incised in centre of wound, a director being introduced, first upwards, then downwards, and the membrane divided upon it with a scalpel. Cellular substance between this last and fascia propria was now cautiously cut, the artery separated from the vein, isolated to about one-fourth of an inch, an aneurismal needle armed with a single silk ligature passed under it and tied, one end being cut away close to vessel, and lips of wound approximated by straps of adhesive plaster. The operation occupied about ten minutes, and was almost bloodless. Trusting to the report of the young gentleman who made the compression with the finger over the bleeding spot, I tightened the ligature, and secured the femoral at the spot above-mentioned, but most unfortunately, on attempting to remove the finger of the assistant, the gush of arterial blood was as copious and furious as before. The application of the actual cautery, button forceps, and pelvis tourniquet were now thought of, but as soon abandoned. Compression having been applied between the ligature around femoral artery, and bleeding spot, it was found that both pulsation and hæmorrhage were by this means instantly arrested, though there were not seemingly above two inches between the above situations, and more than the half of this intervening and interesting part of the arterial conduit, was covered with soft blue flabby ulceration. For the above reasons I determined, with the assistance and concu-

rence of my colleague, to take up the inguinal artery as near the spot where hæmorrhage had appeared as possible, without running the risk of intermeddling with the soft and diseased part of the tube. For this purpose I made an incision from superior termination of former one, upwards through cicatrix of ulceration, and by this means exposed *falx of fascia lata*, I now introduced my director under this last and Poupart's ligament, and with my bistoury incised both upwards to the necessary extent; my finger now easily traced inguinal artery to within about half an inch of bleeding spot, and finding it, as I thought, in a sound state, proceeded to isolate it from the vein and anterior crural nerve, and with ease passed the aneurismal needle, armed as before with a single silk thread, on tightening which, pulsation and hæmorrhage were instantly arrested. In this last operation, which did not occupy more than two minutes, as little blood was lost as in the former one, and the after dressing was conducted in the same manner.

It was remarked by the little patient that not only during last night, but on every previous occasion immediately preceding the hæmorrhages, he had a *presentiment* of what would occur, both from a peculiar restlessness, and also from being annoyed with unpleasant dreams.

*Observations.*—It may be said of these operations, that none of them were required by the strict rules of surgery, which enjoin, that in cases of arterial hæmorrhage, we should cut down to the place from which the blood is observed to issue, and there secure proximal and distal portions of injured tube. All most true, and I most gladly subscribe to this aphorism, along with your regular systematic compilers of surgical treatises, manuals, and compendiums; but, alas! in actual practice how many exceptions are we compelled to make. What would such mechanical men of principles have said had death suddenly taken place (as undoubtedly it would), in attempting to secure a sloughing, soft, and diseased arterial tube? Why, that I ought to have first tried what a ligature thrown round the iliac artery could accomplish, and if a clot did not form, as in all human probability it would, then recourse might be had to the dernier resort, the ligature on the distal side of the hæmorrhagic spot also. Thus it is, however, that you must lay your account, when you advance to practice, to meet with animadversion and criticism, do what you will. In the present case, fortunately, responsibility was landed on many shoulders besides my own.

The last remark which I think it necessary to make, prior to passing to the final reports of the case, is, as to the state in which we found the limb, after the operation of the 26th. In tying the femoral or iliac artery for aneurism, we find often, that the

limb is nearly as warm after the operation as before it, and this, as is well known, proceeds from nature having previously formed to herself, in consequence of the aneurismal interruption, a new channel, by which, when the artery is tied, the current is almost immediately thereafter carried on. Now, in the case under review, no such new conduit was prepared, and the inference was obvious, that if a ligature was applied to the iliac for the suppression of this hæmorrhage, considering nature's previous anxiety for its arrestment, surely injection of sheath and formation of firm clot in bleeding spot, would so completely secure the patient, as that no further risk would occur. It was on this that all our calculations were founded, and though I told you of the great hazard which was to be encountered from the reflux channel, or, as we sometimes observe, from a stray branch going direct from iliac to inguinal or femoral artery, and by this means disappointing our hopes, still, even had I then enjoyed the same knowledge which I now possess, my procedure would have been the same, with this exception, that after throwing a ligature on external iliac, I would have at the same time secured the inguinal at the place of my third operation, and this without the least fear for the vitality of the limb.

The great fault which I committed, and I am free to confess to you that it was an error of consequence, was the taking for granted my dresser's account of the state of the hæmorrhagic spot, before putting a double knot on the femoral artery. My procedure ought to have been, after putting a single knot on the femoral, to have removed the compression by the finger altogether from the bleeding vessel, and if then hæmorrhage occurred, to have undone this knot, and proceeded to what I have described as my third operation. I state this frankly here, to put you on your guard, for though it had no sinister effect on the case, still had it not occurred to me, to try the effect of compression between this spot and the ruptured stem of inguinal artery, death would have in a few moments finished the scene. True it was, as shortly mentioned in the report of the 2nd, I thought of applying to the seat of hæmorrhage a pelvis tourniquet (which I had got constructed expressly for this case), and my colleague, with his usual ingenuity, spoke of his button forceps, but the moment the thumb of the assistant was withdrawn from the fatal spot, subsequent to the second operation, I felt convinced that I might as soon have thought of arresting the tides of the ocean, or of plugging Ætna's yawning gulf, as to have trusted either instrument to save my little unfortunate.

March 3rd.—Last night, was incoherent and restless, but seems more composed and collected this morning. Has taken nothing since 9 P. M. yesterday, except a little wine

and water. No pulsation can as yet be detected in femoral or popliteal artery. Dressings have not been removed since the last operation from wounds or ulcerated parts; discharge from abscess on sacrum and dorsum of ilium is still profuse, and of the same unhealthy appearance. Pulse 144, weak; some thirst, skin cool, tongue moist, functions of alimentary canal and urinary organs natural. Left limb is colder than natural, and about ʒij. of thin purulent matter have been discharged from abscess on dorsum of ilium.—*Contr.*

4th.—Some refreshing sleep at intervals this morning, and has taken his wine and arrow-root with relish. No incoherency. Pulse 144, of jarring hæmorrhagic feel; functions natural; wounds in thigh and lower part of abdomen heal rapidly, and ulceration in hypogastric and inguinal regions also looks more healthy; but, for the first time, last night, had a rigor of about a quarter of an hour's duration.

5th.—Another rigor of an hour's duration during last night, but enjoyed some sleep in the morning; in other respects much the same as yesterday.

6th.—Another rigor of an hour's duration yesterday. Had an anodyne draught, which produced some sleep. Pulse 132, weak; slight thirst, tongue moist, no stool. A communication has taken place between abscess on dorsum of ilium and sore on centre of sacrum, and from this last spot about ʒviij. of fetid pus were this morning discharged. Pulsation has returned to popliteal artery, but none can be detected in seat of former hæmorrhage, the granulations over which have assumed the same healthy appearance as those of surrounding ulcerations. Appetite and strength somewhat improved.—*Contr.*

Reports of 7th, 8th, 9th, and 10th being very long, but of no material import, may be in so many words stated.—His strength continued gradually to give way in consequence of the profuse discharge from ilio-lumbar abscess, but in all other respects he improved. The femoral and abdominal wounds produced by the operations rapidly cicatrized, and the superficial ulceration of hypogastric and inguinal regions also continued to contract and skin over; in short, but for the purulent drain of ilio-lumbar abscess, he was convalescent, at least from the consequences of the operations.

11th.—A better night and seems in every respect improved to-day, pulse 132, of better strength. No return of incoherency, tongue clean, appetite improved, skin cool; two stools from laxative injection; takes his wine with more relish. Quina omitted; ligature around external iliac artery has come away; wound in this spot cicatrizes rapidly, and seems nearly closed. Femoral wound is open throughout whole extent, but surfaces are of a healthy appearance and continue to cicatrize.

trize; hypogastric and inguinal ulcerations improve, lumbar abscess discharges less copiously, and bed sores seem stationary.

12th.—Ligatures around inguinal and femoral arteries have been detached this morning. Wounds continue to look healthy.

13th.—A restless night, and is much annoyed to-day with a dry tickling cough, and uneasiness of chest. Pulse 140, and abdomen somewhat tense, but not painful on pressure; no stool, though an injection was given this morning; wounds still look healthy and continue to cicatrize. No appetite, has taken very little wine since yesterday, occasional moaning. *Castor oil ʒss. wine and nourishing diet continued.*

15th.—Has continued to sink since yesterday. Vomited his arrow-root and wine last night, and is at present incoherent. No stool, no appetite, pulse quick, weak and fluttering, extremities cold, countenance anxious, features collapsed, abdomen tense and somewhat painful. Wound where external iliac artery was tied, now completely closed; femoral wound also has rapidly cicatrized, but discharge from abscess on dorsum of ilium and sacrum, very profuse and fetid.—Died in the afternoon.

#### *Post mortem appearances.*

Contents of cranium, thorax, and abdomen, having been examined, were found perfectly natural. A wax injection was thrown into left common iliac artery downwards, and into popliteal artery upwards. Abdominal viscera having been entirely removed, peritoneum lining the abdominal parietes was found to be in every part entire, and on slitting it open, from bifurcation of common iliac to left groin, over course of external iliac artery, this vessel was found injected only about two inches in its progress, the remainder of the artery downwards having degenerated into a soft substance, still attached to psoas muscle. The superior portion, so far as it allowed the injection to pass, was very much reduced in calibre, not being larger than a crow quill. The internal iliac was about the size of the little finger, and its gluteal branch was traced through the ischiatic notch filled with injection, and anastomosing freely with the external circumflex, which in this case went off from the profunda; external iliac, from spot where ligature had been applied downwards to seat of hæmorrhage, was completely obliterated, and epigastric artery, which went off about an inch below the tied portion, was so small as to be with difficulty traced. Injection had passed freely upwards, from popliteal artery to within half an inch below the place where lower ligature was applied round femoral; here adhesion of the coats was complete. On tracing remains of femoral artery, from situation of third ligature, upwards to seat of hæmorrhage, the tube was found in the same state as inferior portion of external iliac, mentioned above. The pouch, which

was remarked at the second hæmorrhage, was now well seen, and found to consist of the sheath of main trunk of inguinal artery, and when its soft friable walls were removed, an opening about the size of the point of the little finger was observed at the outer side of main stem, the whole circumference of which, and also the calibre of the vessel, for the space of more than half an inch, partook of the same morbid appearance as the above portion of the arterial sheath. Profunda could only be traced from below to within half an inch of spot where third ligature was applied: here it was confounded in the general disorganization of parts. On dorsum of left ilium, extending laterally from anterior superior spinous process to sacrum, and inferiorly to tuberosity of ischium, was an extensive abscess, excavated into irregular hollows, occupying the whole external surface of left os innominatum. To this abscess there were many openings, the largest of which was situated on the dorsum of left ilium, immediately behind the anterior spinous process. On right haunch were two irregular sloughy spots, and on anterior surface of left, there were similar marks of disease.

From a consideration of this case, and the minute inspection just detailed, much may be learned, and as including almost the whole subject of hæmorrhage, and also many of the principles of surgery in regard to aneurism, it is of engrossing interest. I find, however, that I must confine myself to one or two observations only, having so much mixed up the remarks with the narrative of the case, and with the operations which were successively required. Let me, however, strongly recommend to you all, during your leisure moments, to read Jones, and Hodgson, on hæmorrhage, as containing the most accurate set of experiments on this subject, which have as yet appeared. Study those authors in connexion with this beautiful case, remark, as you there read, the process which nature took, from the first occurrence of hæmorrhage till the first operation became necessary—examine how this small aneurismal kind of pouch, so pointedly alluded to in the history and inspection, was formed—of what it was composed, and what end it served. This analysis will lead you to reflect on the means which nature is said to adopt for the suppression of hæmorrhage, and all the beautiful phenomena which accompany this interesting process, as variously explained by the physiologists of former as well as more modern times.

As to the inspection, which all of you had an opportunity of seeing along with many of my professional friends, this in every particular was most satisfactory. You remarked the closure of the arterial tube in all the various situations, both above and below where the ligatures were applied. Nay, even as far as the bleeding spot it was well nigh obliterated, for it was only by passing the silver probe upwards and downwards, from the

small aneurismal-like pouch, that the round calibre of the femoral artery could be developed and traced, to the satisfaction of all who were present. This was by far the most interesting part of the inspection; for with whatever success I had performed my operations, unless these had achieved the complete closure by clot and obliteration of the hæmorrhagic spot, my patient could not for one moment be said to have been secure from the hazard of collateral circulation.

Before, however, I finish this case, I must express my firm conviction, that had these operations (which were performed when my patient was, as it were, moribund,) been sanctioned when the second hæmorrhage took place, he would have been at this moment convalescent. This is the point above every other which I have to regret, and must for ever lament, as well for the sake of my patient as for the credit of my operations; for though in themselves these were completely successful, yet as not ultimately preserving life, they may be apt, by the unthinking and the ignorant, to be regarded as the causes of death, rather than the safeguards and floodgates of that vermilion current, which, ebbing with a frightful rapidity, had so frequently blanched the visage, bedimmed the eye, and chilled the skeleton-like frame of this interesting and helpless little sufferer.

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#### DEATH OF CAPTAIN BURDETT.

IN a late Number we offered some strictures on the impropriety of chemists and druggists preparing physicians' prescriptions, because such persons in general do not receive a medical education. They openly violate the Apothecaries' Act, and keep poisons of the most deadly nature on the same shelf with health-giving medicines. In consequence of our animadversions, we have received an authenticated copy of the depositions, taken at the Coroner's inquest on the remains of the lamented gentleman whose name stands at the head of

these remarks, accompanied by a request that we would examine the medical evidence given on the occasion. We readily comply with this request, as the evidence well deserves notice.

Before commenting upon it, we are happy that we are enabled to state, that no charge of neglect or carelessness can be justly urged against Mr. Moore the chemist, or his assistant Mr. Heath, who committed the unfortunate mistake. It was well observed by an ancient writer, "no man living is wise at all times," and equally well by our illustrious fellow countryman, "to err is human—to forgive divine." There is no man living who has not made mistakes in his avocation, and Mr. Heath must stand excused, according to common sense, reason, and justice. It is to be recollected, that he received at the inquest the highest testimony in favour of his attention, ability, and care, in the performance of his duties as a compounder of medicines. Our valued and scientific correspondent, Dr. Hood, was one of the many medical gentlemen who spoke in the highest terms of his moral character and scientific attainments.

Having premised these remarks, we now proceed to notice the evidence given at the inquest.

It was proved that Mr. Heath had sent the oil of tar instead of a black draught, and a female servant, named Denham, declared in evidence, that Captain Burdett had taken the whole of the draught, except about a tablespoonful, on the Saturday morning,

at a quarter past eight, and had a cup of tea immediately after it. In twenty minutes afterwards, he vomited and was very sick; he was constantly vomiting during the day; he took a little broth at three o'clock, and ate very hearty of asparagus at five o'clock P.M.; slept between five and six; he then appeared quite cheerful. The matter vomited was thrown away immediately, but did not appear offensive,

Mr. John Dill, a surgeon: I saw deceased between eleven and twelve o'clock; found him tranquil; pulse regular; free from pain; was informed that vomiting occurred immediately after the draught was taken. Mr. D. returned at twelve; there was no pain; he talked of the news of the day. Witness returned between two and three o'clock P.M.; was informed that deceased was asleep; called again at seven, when deceased had awoke with head-ache. At eleven o'clock P.M. there was strong vascular excitement, and this led witness to call in Dr. Yates. Cupping was tried without benefit, and venesection was performed between twelve and one, and again at three A.M. About six or seven A.M. on Sunday, there was imminent danger; cupping was again resorted to, and ice applied to the head. Dr. Yates and witness attended alternately until twenty minutes before eight P.M. when the patient expired. Witness has never ordered oil of tar, and does not consider it to be a dangerous medicine under ordinary circumstances; he said, "In my opinion, the small por-

tion that had remained in the bowels and stomach of the oil of tar, being taken up by the absorbents, stimulated the heart and arteries to the increased action we had to contend with, and threw a preternatural quantity of blood on the brain; this, connected with the previous debilitated state of the frame, in my judgment, occasioned the death of deceased."

Dr. Yates deposed that he was called in, 20 minutes before seven P.M. on Saturday; was informed by Mrs. B. the Captain had been some time very much out of health, and was in a very weak state, from having taken a great deal of medicine. The symptoms were severe sickness and violent vomiting, and pain in the fore part of the head. The vomiting consisted of pure bile, smelling strongly of tar. He was perfectly sensible and free from pain in any other part of the body. Ordered effervescent mixture with tincture of henbane. I took my leave, with the simple observation, that I was afraid they would have a stormy night with him, and understanding Mr. D. was to see him again in the evening. I did not apprehend him to be in danger; his pulse was perfectly regular; saw him at half-past eleven with Mr. Dill; he was very restless, tossing from side to side, insensible; pulse greatly accelerated and firm; directed  $\text{ʒ}xiv.$  of blood to be taken from the head, or more if Mr. D. deemed it advisable; a blister to the pit of the stomach, and more opening pills; was called out of bed at twenty minutes to three o'clock; the quantity of blood direct-



ed was taken by cupping; Mr. D. had therefore taken  $\text{ʒxx}$ . from the arm. The deceased was still insensible; heart acting with inordinate violence; pulse large, hard, and quick, about 120. I found a very hard lump in the umbilical region. Ordered V. S. to  $\text{ʒxvii}$ ., wet clothes to the forehead, a poultice to abdomen, and mustard poultices to feet. I ordered him some more strong aperient pills and an opening medicine to be taken every hour. Between five and six I ordered an injection; the bowels then acted freely three times; the hard lump in the abdomen disappeared; there were no restoration of sense; does not know the properties of oil of tar; never ordered it; but thinks it caused death in this instance. There was no autopsic examination.

The jury returned a verdict of manslaughter against Mr. Heath.

The facts of this unfortunate case are extremely interesting to the physician and medical jurist. We, however, cannot agree with the deductions drawn from them by the medical witnesses, and think them liable to complete refutation. The first axiom laid down by the best medical jurists is, that we cannot affirm that poisoning has taken place unless we can demonstrate the presence of the poison. The body was not examined, and therefore the opinion that a small quantity of the oil of tar had remained after the repeated vomiting, after the deceased was so recovered as to take a hearty dinner, and complained of no pain in the abdomen, is founded on a mere supposition, a gratuitous as-

sumption, and certainly was a very slender ground to warrant the conclusion that it caused the death of the patient; it was manifestly impossible for the witnesses to declare that a drop of the tar was in the bowels without having opened them, and detected it by the smell, or other physical or chemical evidence. Nevertheless, the sagacious coroner, and the enlightened jury, considered this evidence conclusive; but we cannot believe that any judge will receive it. We remember an instance in which sudden death was produced by a blow of a mason's hammer on the epigastrium; a verdict of murder was returned by the coroner's jury; the assizes commenced; a medical man swore that the blow was the cause of death; but on the judge asking him, did he open the body, his answer was in the negative, on which he was severely reprimanded, refused his expenses, the trial stopped, and the prisoner acquitted.

The medical evidence in this case, is on a par with that delivered in a late cause, in which some enlightened practitioners considered that death was caused by a narcotic poison, without any proof whatever, either chemical or physical, of its presence.

A jury of thinking men could not have given a verdict of such a nature upon such evidence as this.

It is an axiom in toxicology, that the symptoms produced by irritant poisons, when taken into the stomach, are violent irritation and inflammation in some part of the alimentary canal. There were not any symptoms of gastric

or intestinal inflammation in Capt. B.'s case, and neither was there any proof afforded by autopsic examination. It is also a general rule, liable of course to exceptions, that death seldom occurs in poisoning, when repeated vomiting is produced either spontaneously or artificially soon after the poison is taken into the stomach, and when the usual symptoms do not supervene for several hours afterwards. But admitting, for the sake of argument, that a small portion of the oil of tar remained in the intestinal tube and was absorbed, its effects on the brain, were first noticed at 7 o'clock in the evening, and were preceded by those produced by the ingestion of a full dinner at five, and the supervention of sleep immediately after; facts that would lead us to believe that apoplexy or cerebral congestion might be produced, or, at all events, considerably aggravated. Besides, the delicate state of health of Capt. B., the constitution of the atmosphere, the existence of an epidemic, whose primary influence on the stomach and bowels cannot be questioned, and whose secondary effects on the circulation of the brain, viscera of the chest and abdomen, are admitted, are powerful reasons to induce the belief, that the oil of tar would act much more violently on a person in such a state of health, and at such a time than under ordinary circumstances.

Another fact of great importance is, that we are perfectly ignorant of the effects of oil of tar on the animal economy, and that for ought we know

it may not act in the manner presumed by the medical witnesses in this case. Under all these circumstances, we are of opinion that it is extremely doubtful whether the oil of tar produced the death of Capt. Burdett; and the present state of medical science does not enable the profession to offer positive proof on a matter in which experience is still wanting. Mr. Dill and Dr. Yates both admitted, that they had never observed the effects of oil of tar, and had never prescribed it, and therefore they could not form an accurate opinion of its good or bad effects from the result of their own observations and experience.

We offer these remarks in the spirit of candid and fair criticism, and more especially as they may, in part, induce the gentlemen whose inferences we question, to modify their opinion at the approaching trial.

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#### DR. GORDON SMITH ON FORT PITT.

*To the Editors of the London Medical and Surgical Journal.*

GENTLEMEN,

PERHAPS in your Editorial character you may pause ere inserting a communication from me; in your private one I might reckon confidently on your best services. However I shall study to be as little *egotistical* as possible, and trust you will permit my contribution to appear.

My attention has been almost *concentrated* since the publication of your last Number, upon an article relating to FORT PITT, and consequently engaging more or less the *esprit du corps* to which I have the honour to belong. FORT PITT is well known to me, and is an institution, in all its

parts, which has ever called forth my admiration. Nothing *human*, perhaps, certainly nothing *medical*, can approach nearer perfection.

But I cannot consent to the omissions which (with all my respect for those who have the direction and management of it,) I charge them with *persisting* in making, when their statements of progress are published. It is a fact, that I am the most liberal *donor* to the library upon record. I have presented, perhaps, twice as many volumes as any other person, but extraordinary care seems to have been taken to suppress all mention of me in the published lists. Such conduct is not fair, and makes me almost regret that I ever set my foot across the threshold, or rather the *drawbridge* of the place. It is not very long since I remonstrated upon this subject, and I was surprized to find (on receiving a something in the shape of a ticket) that my donation had been so large.

Do not let me be misunderstood. I have no *complaint* to lay against my department. I have been duly, and perhaps more *unduly*, respected in it; I have been treated in the best possible manner by the excellent gentleman who presides over it; and I have been offered full pay repeatedly; FORT PRTR as a station, or, if I declined that, *any part of the world*, in the possession of the British Government, to which I might chuse to go, in my capacity of a medical officer. These facts are well known in the proper quarter; and the inducement was at one time so strong that I would have given up even MEDICAL JURISPRUDENCE, and gone abroad, had my health permitted.

For *the service* I have even a passionate attachment; but a high sense of duty to the *profession* at large, and a conscientious belief that I could render myself more useful in a civil than a military capacity, has been the cause of that sacrifice of myself, which I cannot longer affect to keep secret. In all my views and objects I have succeeded most satisfactorily;

for I never cared for any thing more than hard-earned reputation; and though still what the majority of society would stile a young man, I could produce volumes of personal memoirs and observations which *some few* know would excite no ordinary degree of attention.

This, however, is matter for consideration elsewhere. The good is done, and I live to behold the consequences.

It is my intention to take up the subject of *army medical economy*, and pursue it through a series of papers, destined, if you will accept of them, for your Journal. The system is *now* a model for universal imitation; and I am confident that I can contribute to do it justice. In my opinion you have done quite right, and acted with unimpeachable wisdom, in lending your pages to the promulgation of the proceedings of those whom I know to be *gentlemen*, and *philosophers*.

I remain,

Your obedient servant,

J. GORDON SMITH,

Royal Lancers.

[We insert the above with readiness, and cannot but express our surprize at the neglect and injustice with which Dr. Smith has been treated. His claims, as the first systematic writer on British Forensic Medicine, intitle him to the respect of every man interested in the welfare and dignity of the profession. Though fortune has frowned upon him, fame has conveyed his merits wherever medicine is cultivated.—EDS.]

*Separation of Peroxide of Iron from the Oxydes of Cobalt and Nickel.*  
By M. Liesig.

NEITHER carbonate of magnesia nor that of barytes can be employed for this separation, because the salts of these two bases are entirely decomposed, and the oxides precipitated by them. But carbonate of lime may be advantageously used.—*London and Edin. Philos. Mag. and Journ. of Science.*

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

I THANK you for your courteous acknowledgment of the suggestions of a Coanite; and if the following be considered worthy of a place in your Journal, my end will be answered. To you as an obstetrician, I shall leave its acceptance or rejection.

I remain,

Your constant reader,

DYSTOCIA.

ON THE OPERATION OF TURNING.

There is, perhaps, no portion of the duties of the general practitioner, which more imperiously calls for all his professional skill and attention, and for his coolness and self-possession in immediately applying his resources to the exigencies of the case, than the obstetrical portion. The manual operation of turning has deservedly received the greatest attention at the hands of all the obstetric writers of this and of other countries, and by them certain rules have been handed to us for our guidance in those cases which are considered as requiring this operation. By the great mass of obstetric authorities,—Blundell, Denman, Merriman, Dewees, Ryan, Breen, Delpech, Velpeau, &c. &c., we are taught in all cases, where it is practicable, to bring down *both feet*; but when we cannot reach the second, to be contented with bringing down *one*. Now considering how truly this is a received and acknowledged *cathedra dictum*, taught in the lecture-room, and acted upon at the bed-side, for an anonymous writer to oppose it might have savoured a little of folly; but it is opposed by an authority of no mean pretensions. Mr. Radford, in *The Edinburgh Medical and Surgical Journal*, has propounded a different, and, as I opine, a much safer and more judicious procedure, both as mother and child are concerned. If, after searching about the uterus, and so trebly increasing the sufferings of the mother, we cannot find the other

foot, we are to be content with the first seized, and bring the *one* down, inasmuch as experience has proved that it is equally safe both to mother and child so to do. Now, on the contrary, I would assert that *one foot* or knee ought always to be brought down, and never *both*. It is not safe to the life of the child to bring down both; and it is the bringing down of both which has caused practitioners to lose so many children in the operation of turning. By bringing down only one foot, the other thigh is left doubled on the abdomen. The dimensions of the presenting part are made to approach more nearly to those of the head, and the funis is protected from compression. In those cases which are considered the safest, both for mother and child, as vertex presentations, both the os uteri and os externum are completely dilated in the passage of the head, and consequently the other parts follow safely and rapidly. The dimensions of the head are about  $12\frac{1}{4}$  in. to  $13\frac{1}{2}$ . The next nearest approach to this is that of the breech, with one thigh bent upon the abdomen, which is from  $11\frac{1}{2}$  to  $12\frac{1}{2}$ . Thus, in bringing only one foot down, we leave a bulk which must dilate the parts in its passage to an almost equal extent with the head, and, under such circumstances, the head experiences little or no resistance, rapidly follows the body, and so the funis escapes compression. By omitting the exploring after the other foot, the time for retaining the hand in utero is materially diminished, and consequently the excited irritability considerably lessened; and by well lubricating the passage with lard, the pain of the operation essentially decreased. In cases where the liq. amnii has been long discharged, and the body of the child is strongly girt by the uterus, there can be no option, we must seize either foot or knee; if the knee is brought down the foot will soon follow. Where the feet are together, and we have our choice, I would, on the authority of a gentleman of most extensive obstet-

tric practice, residing in the Borough, recommend the off-one to be selected and brought down. The gentleman alluded to has not lost one child in turning, since he has adopted the practice of bringing down only one foot.

DYSTOCIA.

*To the Editors of the London Medical and Surgical Journal.*

GENTLEMEN,

IN the last Number of your Journal, I observe a letter from Dr. Murray, of this city, on the effects of the removal of atmospheric pressure from the surface of the body in cholera; I think it but justice to myself to mention that this is a remedial measure, of which I suggested the trial several months ago. It is very possible that the idea may have occurred to Dr. Murray, without any communication from others, as it did to myself, from mere reasoning on the subject; but it is also probable that some of the various persons, in and out of the profession, to whom I mentioned my intention of trying it, (with the physiological, and pathological reasons for doing so,) immediately on cholera appearing in Dublin, may have communicated in casual conversation the idea to him, and to others, as one that they had heard, at first or second hand from me. Except that it would occupy too much of your valuable columns, I might send you documents, from professional persons to prove these facts and dates many months before the period of Dr. Murray's trials of the plan. To the public or the profession, however, it is of very little moment, who suggests or who adopts a remedy, but as I intend to prosecute this inquiry further, and to publish the result, it is sufficient for my purpose at present, merely to state what I have said above, namely, that the idea was original in my mind, without in the least doubting that the same idea, or even the same train of reasoning, may have occurred to another or to a dozen others, quite inde-

pendantly, or even very nearly at the same time.

I am your obedient Servant.

C. E. H. ORPEN, M. D.

Member of the Royal Colleges of Surgeons of Ireland, and in London &c.

11, North Great George's-street,  
Dublin, 17th July, 1832.

MEETING OF THE PROFESSION,  
*Friday, July 27th, 1832.*

A MEETING of the members of the medical profession was this day held, to consider the best plan that could be adopted, to enable Dr. Ryan to meet the expenses he had incurred in the action brought against him by Dr. Ramadge. Dr. SIGMOND was called to the chair, and opened the business of the meeting, by stating that the present question was interesting both to the medical profession and the public at large. It was not surprising that the indignation of the medical public should have been directed against a member of the profession, who had by his writings and general conduct, supported an uneducated pretender to science, but more so that a gentleman, who from his station as a Fellow of the College, was one of the very individuals to whom the guardianship of the profession and the public belonged in a more especial manner, and it could not be wondered at that an Editor of a medical Journal conducted on honest and proper principles, should defend his profession in the manner Dr. Ryan had done. He eulogised the talent and independence of that gentleman, and concluded by stating, that he felt persuaded something would be done to defend the liberty of the medical press by the public at large.

Dr. UWINS immediately rose to propose the first resolution, expressing his feelings towards Dr. Ryan, as an independant Editor, and coinciding with the chairman in the view he had taken upon the question; he felt assured that the sympathy of the pro-

fession was with him, and that he would doubtlessly have its generous support.

The following resolutions were put and unanimously carried.

Moved by Dr. UWINS, and seconded by Mr. HENRY.

Resolved, that this meeting is of opinion, that the verdict in the case *Ramadge versus Ryan* and others, which was recently tried in the Court of Common Pleas, is, in its results, severe and oppressive, to a degree altogether disproportioned, in their judgment, to the alledged libel.

Moved by Mr. QUIN, and seconded by Mr. COSTELLO,

That it is the opinion of this meeting that Dr. Ryan, the principal defendant, in sanctioning the publication of this alledged libel, was actuated entirely by a strong feeling for the honour of his profession, and that any imprudence which may be chargeable upon his conduct in this matter ought in fairness to be referred to his zeal in maintaining the character of the medical community.

Moved by Mr. HOLMES, and seconded by Mr. REILLY,

That under such circumstances, we are of opinion that the profession at large should be solicited to contribute to defray the expenses imposed upon the defendants, by a verdict which has been received with such universal surprize, and that a Committee be forthwith appointed to carry this resolution into effect, in the manner which it shall deem most suitable to the occasion.

A Committee of five gentlemen was subsequently appointed to receive subscriptions, viz.

Mr. Greville Jones. 8, Hatton-garden.

Mr. William Quin, Kennington.

Mr. J. Pocock Holmes, Old Fish-street.

Mr. Costello, 7, Parliament-street, Westminster.

Mr. Foote jun. Sec. 36, Tavistock-street, Covent-garden.

THE  
SPIRIT OF MEDICAL LITERATURE.

No. 3.

*Application of the actual Cautey, by  
PELLETAN.*

THE students surrounded the patient, who was placed on a chair in the middle of the ward, and near him was a red-hot caldron (we shudder while transcribing), with irons of different forms, square, round, triangular, and diamond-shaped. M. Pelletan, after brandishing one of these fiery weapons in the air, applied it to the cancerous surface, and kept it there several seconds. He applied four or five of these red-hot irons, of different forms, till the whole surface was an eschar. Two days afterwards the eschar had separated, the whole mental portion of the lower jaw was bare, the mental foramen on one side was exposed, and at the centre of the chin the bone was black, where the actual cautey had reached, and destroyed it. I did not remain long enough at L'Hôtel-Dieu to witness either the exfoliation of the dead bone, or the death of the patient.

JOHN CROSS.

*Examinations at the Royal College of  
Physicians.*

The power of a College of Physicians, to examine men who have received their degrees from universities, is perhaps a satire upon universities; surgeons and apothecaries undergo no examination previously to their appearance before the College of Surgeons, or the Company of Apothecaries.—*Annals of Medicine.*

*Corpulency.*

A certain degree of corpulency, corresponding to a person's age, is a sign and effect of perfect health; but when it is in excess, it is both a disease in itself, and the cause of others. It may, however, at all times be effectually reduced by severe bodily exercisc, little sleep, and a dry and

spare diet, provided one set about it in earnest, and with sufficient resolution. It is a rare thing to find a common soldier complaining of this disease.—GREGORY.

#### *Experiments on the Spine.*

Having introduced a stylet into the vertebral canal of a rabbit, twenty days old, between the last dorsal and the first lumbar vertebræ, I destroyed all the lumbar portion of the spinal marrow. The posterior parts were all instantly deprived of sense and motion; but the rest of the body was full of life, and respiration continued nearly as before. This state of things continued but a short time. In a minute the animal seemed anxious; it agitated its fore-paws; in a minute and a half respiration ceased, and was soon after replaced by infrequent gapings, accompanied by feeble inspiratory motions of the chest, which ceased entirely in three minutes and a half, at the end of which time there existed no sensibility, nor any of the signs of life. This experiment was repeated upon two other rabbits of the same age, with the same result. In one, respiration ceased in one minute, and the animal died in three; in the other, it ceased in about a minute and a half, and the animal died in four minutes. I endeavoured to prolong the life of the latter, by inflating the lungs, and commenced the insufflation before irritability, and the gapings had ceased; but these phenomena disappeared as quickly as if nothing had been attempted. I frequently made the same attempts in similar cases, but always in vain.—LEGALLOIS.

#### *Experiments on the Aorta.*

If the aorta of a rabbit is tied at the anterior part of the abdomen, sense and motion soon begin to disappear in the posterior parts.

LEGALLOIS.

#### *Excitability of Muscle.*

By applying strong stimuli to the spinal marrow of a frog, strong and

repeated contractions were excited in the muscles of the hind limbs. On examining the state of the muscles, they were found wholly deprived of their excitability. The division of the nerves of a limb does not prevent stimuli immediately applied to the muscles, from causing contraction as before.—WILSON PHILIP.

#### *Chyle.*

The chyle of the horse is composed, 1st, of albumen, which constitutes the greatest part of it; 2ndly, of fibrine, or at least of a substance which resembles it in several respects; 3rdly, of a fatty substance, which gives to chyle the appearance of milk; 4thly, of different salts, such as potash, muriate of potash, and white phosphate of iron, that is phosphate at a minimum of oxydation.—VAUQUELIN.

#### *Ultimate Texture of Bone.*

The ultimate texture of bone is not lamellated, but reticulated, the phosphate of lime being deposited as an interstitial substance; for although from the greater compactness necessary to the bones of quadrupeds, the ultimate structure in them is not so readily traced, yet in the more delicately constructed bones of birds, this mode of arrangement is sufficiently obvious, and may at any time be readily ascertained.—HOWSHIP.

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#### PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

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For some time past it has been announced, through the medium of the medical Journals, that the provincial physicians, surgeons, and general practitioners, were about to form a society under the above title, somewhat similar to the "*British Association for the Advancement of Science*," that met together last month at Oxford.

In consequence of this arrangement, a meeting of medical gentle-

men took place on Thursday morning, the 19th inst. at the Worcester Infirmary, for the above purpose. Dr. Johnstone of Birmingham, was unanimously called to the chair. There were also present the following eminent individuals:—Dr. Kidd, Regius Professor of Physic, Oxford; Dr. Barlow, of Bath; Dr. Corrie, of Birmingham; Dr. Evans, Jun. of Ross; Dr. Conolly, of Warwick; Dr. Conolly, of Cheltenham; Dr. Thomas, of Rose Lawn, Worcester; Mr. Hodgson, of Birmingham; Mr. W. Sands Cox, of Birmingham; Mr. Soden, of Bath; Mr. Hetling, of Bristol; Mr. H. Carden, of Gloucester; Mr. Selwyn, of Ledbury; Mr. Jennings, of Leamington; Nankivill, of Coventry; Mr. Shelton, of Bromyard; Mr. Jones, of Kidderminster, and many other distinguished practitioners, including Drs. Hastings and Malden, of Worcester, and most of the resident faculty of that city and neighbourhood, amounting altogether to more than fifty medical gentlemen. Letters were also received from several distinguished individuals, expressive of regret from inability to attend.

The immediate list of members enrolled amounted to nearly 200, containing the names of the most eminent men from every part of England.

At this meeting, an able and luminous *exposè* of the objects of the Association, prepared by Dr. Hastings, was read by that gentleman; after which several resolutions were carried, and a council formed to conduct and manage the institution. The principal objects of which are,

1st. The collection and publication of useful medical and surgical information, whether speculative or practical, through original essays or reports of provincial hospitals, infirmaries, or dispensaries, or of private practice.

2d. The improvement of medical topography.

3d. The investigation of endemic and epidemic diseases.

4th. The advancement of medico-legal science.

5th. Biography of distinguished medical characters.

6th. A retrospective annual view of medical and surgical science.

7th. The maintenance of the honour and respectability of the profession generally, in the provinces, by promoting friendly intercourse, and free communication of its members, and by establishing among them the harmony and good feeling which ought ever to characterise a liberal profession.

At six o'clock the members present sat down to dinner at the Guild Hall Coffee House, when the venerable Dr. Johnstone again took the chair, and Drs. Hastings and Malden acted as vice-presidents.

Nothing could exceed the conviviality of the meeting. Several toasts and speeches were given during the course of the evening, applicable to the occasion, and the party did not rise from this social communion and entertainment till a late hour, and separated under the most gratifying prospect, not only of its permanence, success, and prosperity, but of its forming, both as to extent and numbers, such an assemblage of provincial talent and character as was never before convened together, either in this or any other country.

In consequence of the very numerous list of members and respectable support given to the Association, by the most distinguished professional gentlemen of Bristol, it was unanimously determined, that the next annual meeting should be held in that city; and that Dr. Carrick should on that occasion act as president.

The anniversary following is intended to take place in the University of Oxford, to which city the members of the Association are invited, through the courtesy of Dr. Williams, to hold their meeting in the Radcliffe Library.

A printed report of the rules and proceedings of the first formation of the above Association will be imme-



diately circulated amongst its members; and also distributed to the profession in the different districts, for the purpose of obtaining the support of all those gentlemen who feel an interest in the advancement of medical science in the provinces.

### Reviews.

*Literatur der Syphilitischen Krankheiten: the Literature of Syphilitic Diseases, from 1794 to 1829.* By H. AUG. HACKER, M.D. 8vo. pp. 264. Leipsic, Gleditsch.

At a time when medical works are increasing with amazing rapidity, so much so, that it is impossible to be *au courant* with all the publications which appear, the thanks of the profession are due to that person who supplies its members with a chronological and analytical table of all the productions upon any one disease. Dr. Hacker includes in his book, an enumeration of those only which have been published between 1794 and 1829. Girtanner, in the second and third volumes of his *Treatise on the Venereal Disease*, has given a similar list up to the former period, so that the work at present under notice is rather to be considered as a continuation of Girtanner's, than as a distinct and separate production. It is one which, from its nature, must have cost infinite labour and research, while it is not likely to yield much fame to the industrious compiler. We shall be glad to see it in an English dress, together with so much of Girtanner's, as is necessary to render it complete.

The authors are cited in chronological order. After the surname and Christian names of the author, comes the full title of the work, or the journal in which the essay is published is pointed out, thus securing immortality for many an author, who would otherwise have sunk in the sea of oblivion. Were it for that part of his work alone, Dr. Hacker

will merit the gratitude of the profession, as, although he may bring to life for a time a great deal of trash, that will secure its own ruin, while many valuable essays and books may be rescued from the unrelenting grasp of time. Next follows, in two words, the opinions of the author, the remedies which he recommends, &c. The titles are given in the language in which the work is written. Two tables, one for the names of the authors, the other for the diseases, complete the book, and facilitate considerably the researches of others.

### Statement of Facts with Observations. By DR. CRAIGIE, of Leith.

DR. CRAIGIE published a letter in the *Edinburgh Courant*, respecting the use of saline injections in cholera, without mentioning Dr. Latta's name, on which account, a person styling himself "a member of the Leith Board of Health," writes a letter to the same paper, and abuses the doctor, ascribing the whole merit of the affair to Dr. Latta. Now we must say that we cannot see that any greater merit belongs to Dr. Latta than that of putting in practice the suggestion of another, acting on the principle, in desperate diseases desperate remedies are required. If we look back to the essays, books, and reports published on cholera, we shall find the little merit which he can claim considerably diminished; M. Hermann of Moscow, first proposed the injection of water into the veins in cholera; transfusion was performed several times by M. Deiffenbach of Berlin; Dr. Stevens, and others have recommended and employed salines by the mouth and enemata, and Dr. O'Shaughnessy proposed, at the Westminster Medical Society last year, saline injections in cholera, which Dr. Latta did not try until the end of last April, and he was followed in a few days by Dr. Craigie, consequently it belongs to neither, although some little may

appertain to Dr. Latta for putting in practice, and also to Dr. Craige for the modifications he has introduced, should they prove advantageous. On perusing Dr. C.'s letter to the *Edinburgh Courant*, with the comments affixed, we cannot help expressing our surprise at the obtuseness of intellect which could deem it proper matter for attack; but our astonishment lessens, or rather gives way to indignation, on discovering who the fellow is that has thus dared to interfere in medical affairs; Mr. John Mitchell jun. *ship broker*, a member! (God save the mark!) of a soi-disant Board of Health at Leith, is the individual who has magnanimously done this deed. This is the second time we have had to notice the flippant intrusion of an unprofessional person in medical affairs in the sister country; if the Scotch members allow of such a procedure a third time without expressing their indignation at it, they will forfeit all right to bear the ancient motto—*nemo me impune lacessit*.

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ON  
PRETERNATURAL LACTATION;

By DR. KENNEDY, *Ashby-de-la-Zouch, Leicestershire.*

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ARISTOTLE gave immortality to the he-goat of Lemnos, when he affirmed, for the benefit of after-ages, that this generous animal yielded a profusion of milk, from which the goatherd made excellent cheese: Very useful too, in his way, was "the wether which suckled a lamb;" and the history of this phenomenon is a contribution to philosophy, from the pen of Dr. Doddridge, alike distinguished for his sagacity, and erudition, and piety.

Donati, in his "Marvellous History;" Paullini, in his second "Century;" and the Bishop of Cork, relate instances of the lacteous secretion being abundant in men.

Cardani enumerates the circumstances of a young woman, who had

never been impregnated, whose breasts yielded milk, on their being excited with the stings of nettles.

Dr. Stack, and Dr. Montégre, have detailed cases of copious lactation, accidentally re-produced in aged women: to these the present writer will add some account of a woman who gave suck to children, from the *twenty-fifth* uninterruptedly to the *seventy-second* year of her age; this person is still alive and accessible to examination.

1. *Dr. Stack's History*.—Elizabeth Brian was examined by Dr. S. and another gentleman, at her house in Tottenham-court, in 1733: she was then in the sixty-eighth year of her age; and for more than 20 years she had not given birth to a child. Her breasts were "full, fair, and void of wrinkles; but her face was very much withered, her cheeks and mouth vastly sunk in, her eyes red and running with a clammy humour." Upon pressing her right breast at the Doctor's desire, "she fairly squeezed out milk, which gathered in small drops at three of the lactiferous ducts terminating at the nipple." Having himself carefully dried the nipple with his handkerchief, Dr. S. made her repeat the experiment, and it had the same result. About four years previous to this examination, E. B.'s daughter, being obliged to be absent for a considerable time, left a babe she was then suckling, in the care of its grandmother: the old woman "finding the child froward for want of the breast, applied it to her own, barely in order to quiet the infant, without the least thoughts of milk." This having been repeated several times, a son of E. B.'s, now grown a man, perceiving that the young one swallowed something from the nipple, "begged leave of his mother to try if she had not milk: his experiment succeeded, and he drew milk out of the same breast from which he had been weaned above twenty years; for seventeen or eighteen years previously his mother had not given suck to any child. Two years afterwards,

E. B.'s daughter had another babe ; whereupon its grandmother weaned the first, and commenced suckling the new-born infant. " In my presence," says the Dr., " this infant took the nipple with as much eagerness and seeming delight as I ever perceived in a child of two years old ; and at it plainly performed the actions of suction and deglutition ; the two children, both girls, are, as to constitution, such as I could wish to the dearest friend ; plump, and firm in flesh ; in complexion, cleanly, fair, and healthy ; and in temper, brisk and sprightly, considering the mean diet of their nurse. When this good woman came to town," the Dr. adds, " which was near two years since, her milk abounded to that degree in both breasts, that, to convince the unbelieving, she would frequently spout it above a yard from her : a particular which, among others, the good man and woman of the house, and others of the neighbourhood likewise, assured me of. Now her left breast is run dry, and she has no great quantity in the right ; but what there is, is as good milk as one may desire in a nurse. The poor woman seems perfectly honest and artless, and even inclines strongly to dotage : she very religiously throws the whole upon a miracle.

II. *Montégré's History*.—Having collected a number of analogous facts, Dr. M. published them in the ' Gazette de Santé,' in connexion with the following, which came under his own observation. " La Femme Charles," a delicate female, had male twins in 1810, but from the great weakness of her constitution, she could hardly supply one of them with milk ; and, in consequence of extreme poverty, was unable to procure the services of a nurse. Affected by this discouraging embarrassment, says Dr. M., her mother took one of the infants and put it to her own breast, which the babe instantly seized and began to suck. This ingenious grandmother was then in the sixty-fifth year of her age, and had been twenty-

nine years a widow. At first her breasts yielded a fluid, in small quantity ; but in a few days, her infantile grandchild drew from them an abundance of healthy milk. This tender nursing continued for two and twenty months to be nourished at its grandmother's breasts ; and throughout all that period was more vigorous than its brother who imbibed his sustenance from their common parent.

III. *Dr. K.'s History*.—Judith Waterford lives in the village of Thringston, on the Forest, between Ashby-de-la-Zouch and Loughborough, Leicestershire. At this time (December, 1831), she is in her eighty-first year, and though infirm, her constitution has singularly retarded the advances of old age.

Through life this woman has been the active and laborious inmate of a peasant's cottage ; her person is short and well-proportioned ; at one time she weighed about 14 stone ; her temperament is the neuro-sanguineous, distinctly marked. The peculiar circumstances of her history being extensively known in the district where she resides, she has been visited by many clerical, medical, and other curious inquirers.

J. W. had two husbands. Previously to her first marriage, her menstrual secretion appeared at regular periods ; it continued nine days usually, and was very profuse, but preceded and accompanied with little pain or disturbance of the system. After this went, it returned only nine times, at distant and irregular intervals ; and on each of these occasions it was abundant, without causing any perceptible diminution of her milk.

J. W. was first married in 1777 ; her first child was born in May 1778, and from that period till May 1825, her lacteous secretion never in the least subsided. Besides giving her breast freely and frequently to the young ones of her neighbours, she suckled six children of her own by her first husband, and eight nurslings ; she had two miscarriages. Her first confinement was followed by an

excessive uterine discharge, which continued three weeks and induced considerable debility. No infant, however vigorous, was ever nearly able to use her supply of milk, and, in consequence, she often had her "breasts drawn" to the amount of two quarts in a day; her belief is, that, in general, she could have suckled four lively children at the same time. Many attempts were made, even under medical direction, to suspend the secretion of her milk, but they all utterly failed. Her breasts often became tense and painful; and, for the removal of this state, she had them well rubbed with butter made from the cream of her own milk; this process was invariably advantageous. Sometimes about a pint of this cream was collected, and the butter it yielded was white, and soft as lard, with a sweet taste. Judy took much food, and seldom had recourse to medicine; it is her boast, indeed, that "she never paid a shilling in her life for doctoring, for the sake of her health;" her bowels generally were torpid, often constipated.

J. W. was a widow nearly three years, and gave suck to her own and other children during the whole of that period. She had one still-born child to her second husband. Her breasts even now retain a size quite extraordinary, and the axillary glands are occasionally large. Soon after the disappearance of her milk, in 1825, her health became more variable, her energies gradually failed, and her voice, which still is strong, lost its natural strength. Her actual powers of mind seem to have experienced little change; she continues "heart-whole;" her appetite is considerably impaired; she wishes to eat often, but takes little food at one time; her sleep is disturbed and unrefreshing, and a cough gives her occasional annoyance; her pulse is full, soft, not quick, and resistant. For many months, she has been slightly troubled with those periodical disturbances by which menstruation is preceded.

Although Judy's milk ceased for a time, in 1825, it repeatedly appeared in minute quantities during the five subsequent years; but since the autumn of 1830, the secretion of this fluid has been constant, and, if encouraged she thinks), would be sufficient to nourish a child; from attempting this, however, she is deterred by the idea, that "it would soon be the end of her."

December 6th, 1831. This day, being in the middle of her 81st year, Judy readily filled a small spoon with her milk, by squeezing her left breast frequently with the hand. This milk was rich and sweet, and not different from that yielded by young and healthy mothers.

Here, then, are the remarkable circumstances of a woman who menstruated during lactation—who suckled children uninterruptedly through the full course of forty-seven years—and who, in her eighty-first year, has a moderate but regular secretion of milk.—*Med. Chir. Rev.*

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#### APOTHECARIES' HALL.

LIST OF THE NEW COURT OF EXAMINERS,  
FOR THE YEARS 1832-33.

*Elected and confirmed on the 31st  
of July, 1832.*

JOHN BACOT, Chairman.

Allen Williams; Henry Blatch;  
Samuel Merriman; Thomas Hardy;  
John Ridout; Henry Cromwell Field;  
Chas. Shillito; Thos. Lowe Wheeler;  
Philip Johnson Hurlock; John Hunter, jun.; Edward T. Gart.

*July 26th, 1832.*

Names of gentlemen to each of whom the Court of Examiners granted a certificate of qualification, this day.  
Samuel Abraham, Teignmouth;  
George Atkinson, Sunderland; William Batten, Oswestry; Edward Connelly, Bromborough, Cheshire; William Gerald Dickinson, London; Abraham Evans, Exeter; James Ken-

worthy, Manchester; Thomas Darke Martyr, St. Columb; Septimus Rodick, Pelmarsh; Charles Wilson Steel, Abergavenny; William Horatio Sholl, London; John Buck Thomson, Broadstairs; John Raggett Unwin, Surrey.

#### JACKSONIAN PRIZE OF THE ROYAL COLLEGE OF SURGEONS.

THE essays for the Jacksonian prize, for the year 1833, are to be on the formation, constituents, and extraction of urinary calculi. The essayists to be members of the College, but not of the Council. The dissertations to be in English, the number and importance of facts being considered principal points of excellence. The prize essay is to be the property of the College. The papers, with the illustrative drawings, &c. must be sent to the Secretary, before Christmas, 1833.

#### CHOLERA IN THE HIGHER RANKS OF SOCIETY.

THERE has been a meeting of the different Life Insurance Companies in London, in consequence of the reported prevalence of cholera among the higher ranks; and it appears, from an examination of deaths, that, since the commencement of the disease in the United Kingdom, up to Friday last, the 27th inst., there had been but thirty-six claims on the score of deaths from this cause, rather a cogent reason for believing that it has exerted its malignant influence chiefly on the poor.

#### New Principle in Cinchona.

M. Van Mons has discovered a new principle in the bark of the *cinchona montana*, which is white, crystallizable, and extremely bitter. The discoverer calls this *montanine*, and says he has cured intermittent fevers in three days with it, in doses of two grains a day.—*Buchner Repertorium für die Pharmacie.*

## Hospital Reports.

### WELBECK DISPENSARY.

#### *Porriago larvalis, with ulceration of the forehead.*

ELIZABETH WARDWELL, ætat sixteen months, admitted May 22d, 1832, under Dr. Sigmond; has been affected with this disease for eight months; it first shewed itself at the period of dentition; it commenced on the head, but in about two months afterwards it spread to the forehead and upper part of the face. The child has been under medical treatment with varying success. It sleeps very badly at night, starting and screaming; bowels tolerably regular. There is an extensive ulceration on the forehead, between and above the eyebrows, which the mother attributes to the child scratching itself, and which she states herself unable to prevent.

R *Ung. hyd. nitrat.*

*Ung. eclacei a a ʒss.*

*Mft. ung. part. affect. applicand.*

*Pulv. rhei.*

*Magn. carb. a a. gr. v.*

*Pulv. jalapæ, gr. iij. ft. pulv. omni mane sumend.*

24. Improving; sleeps better. *Rep.*

29. The ulceration is diminished; bowels open twice a day, stools dark and slimy; the starting and screaming at night has ceased; tongue clean; a papular eruption has appeared on the sides; has cut only eight teeth.

*Pergat.*

June 2. The scalp and skin clearer; ulceration continues to diminish; bowels regular.

*Rep. pulv. et ung. p. capite.*

*App. farina tritici ulcum.*

5. The child appears better on the whole; eversion of the upper eyelids takes place when it is asleep, but ceases when it wakes; lippitudo.

*Rep. pulv.*

*Sulph. zinci, gr. viij.*

*Aq. distill. ʒviij.—Lotio p. ocul.*

The application of flour to the ulceration is to be omitted, as it appears to cause irritation.

16. The head is nearly clear, but there appears more eruption on the face.

*Pulv. Decoct. dulcamaræ pro lotionē.*

28. Has not attended since last report, but the mother says she has had a sufficiency of medicine; the ulceration is nearly healed.—*Pergat.*

July 19. The ulceration has been healed now for a fortnight; there are still a few maculæ on the head; the medicines last ordered have been persisted in since. Union appears to have taken place between the tarsi, at the outer canthus of the left eye. *Rep.*

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.

CATARACT.

Of the operations for cataract, two were for depression.

Joseph Procter, æt. 22, Jan. 30th, 1832. Capsular cataract from injury when he was five years old. Mr. Guthrie separated the capsule from its adhesions, and depressed it. Slight attack of inflammation followed, which the usual antiphlogistic remedies overcame; and, on the 4th of February, he was discharged, the cataract having become almost entirely absorbed, and since that period has been completely.

Edward Collins, æt. 13 months, May 21st, 1832, with capsulo-lenticular cataract of the right eye.

Mr. Guthrie depressed the cataract, and the case did well; was discharged from hospital the following day, and has since gone on very well.

There have been six patients operated on for breaking up the cataract.

James Stockman, æt. 25, Jan. 27th, 1832. Capsular cataract of the right eye, first noticed ten months since.

Mr. Guthrie separated the adhesions of the capsule with the iris, and broke up the cataract. He was discharged on the 1st Feb. The capsule still seen floating, but it was ultimately absorbed without further operation.

Edward Madle, æt. 25, Jan. 27th, 1832. Capsulo-lenticular cataract of the left eye, the right eye being perfectly sound. He did not notice the gradual formation of the cataract.

Mr. Guthrie broke up the cataract; partial absorption took place. On the 29th Feb. he was again operated upon; much more of the lens became absorbed after this; but, May 20th, it was necessary again to operate, and the capsule was more frequently broken up, and a slight adhesion, which it still had with the iris, separated. The cataract, after this, became so absorbed as not to interfere with vision.

During this last operation, when Mr. Guthrie separated the capsule from the iris, the iris, at that portion, instantly became changed in colour, becoming quite green, and this, on the following day, had spread over the whole iris; so that, as to colour, it had the appearance of acute inflammation.

Ellen Mills, æt. 15; 1st Feb. 1832. Soft cataract of both eyes.

Mr. Guthrie operated on the right eye by breaking up the lens. After the operation, a considerable portion was absorbed; but it required that the lens should be further broken up, and, on 29th Feb. the operation was repeated.

On the 5th March she was discharged, and afterwards attended a short time as an out-patient; the lens was completely absorbed.

Thomas Sewiss, æt. 10, Feb. 1st, 1832, with congenital cataracts of both eyes. His father stated that his sight was first affected seven years ago, but that it was only two years since he became quite blind. His mother's father brought him to the hospital, and was affected in a similar manner in both eyes.

Mr. Guthrie broke up the cataracts in both eyes. The cataracts did not appear to have been much absorbed after this operation; therefore, on the 29th of February, the operation was repeated in both eyes, after which much more of the lens in each eye

became absorbed. But still portions of the hardened capsule required a third operation in either eye; but this was quite successful, the boy's vision being restored by the complete absorption of the cataracts.

Jane Brazier, *ætat.* five, May 5th, 1832. Congenital cataract of both eyes.

The operation for breaking up the lens and capsule was performed in both eyes. Slight constitutional irritation succeeded the operation, but no local inflammation; she was discharged in a few days, absorption of the cataracts going on rapidly. (*See W. Hoole's case.*)

There were six operations for extraction of the lens.

Mary Sullen, *æt.* 65, 1st February 1823. Hard cataract of the left eye: the right lens is also becoming opaque.

Mr. Guthrie extracted the lens, making the section of the cornea upwards. Slight inflammation followed the operation, which was subdued easily; and, on the 6th February, the eye was quite free from inflammation; cornea had united smoothly, pupil regular, and can see with the eye very well.

Sophia Williams, *æt.* 60, 29th Feb. 1832, with hard cataracts of both eyes. Cannot see any thing with the right, and but faintly with the left. The cataract was removed from the right eye, by extracting the upper section of the cornea. There was, for several days, some inflammation, but this was subdued, and the eye became quiet, and she was discharged 20th March, and could see pretty well.

Charlotte Richards, *æt.* 45, March 14th, 1832. Cataract of both eyes, the left more advanced, and Mr. Guthrie removed the hardened lens in the usual manner; the usual after-treatment was adopted, and she was discharged 24th March; but her sight was rather imperfect, on account of chronic conjunctival inflammation.

James Stovey, *æt.* 72, April 25th, 1832. Had cataract of the right eye. The operation was performed in the

usual manner; but on the 2d May, after having gone on well till then, great inflammation was set up from cold; he is now (June 1st) in Hospital, the cornea having suffered from the inflammation, and being opaque,

Harriet Highfield, *æt.* 58, May 4th, 1832. Hard cataract of the right eye—lens of the left becoming opaque. The right lens extracted in the usual manner. There was very little after-treatment necessary, the local and constitutional symptoms being mild, and on the 13th she was discharged cured.

David Silver, *ætat.* 68, admitted 19th March, 1832, with hard cataract of the left eye, and incipient cataract of the right.

On the 23d, Mr. Guthrie performed the operation of extraction in the usual manner. The operation was succeeded by violent inflammation, and although the lancet was freely used, suppuration ensued. The patient did not complain of any pain during the inflammation.

The next case should have been inserted with those where the cataract was broken up.

W. Hoole, *æt.* 67, March 2, 1832. Mr. Guthrie broke up a capsular cataract of the left eye, which the patient had noticed only for six months; then followed considerable fever and local inflammation, and, on the 28th of May, the report states there is still slight conjunctival inflammation; the pupil is clear, and his sight improving daily. He was then discharged.

There was one case of milky cataract. The patient, a man of the name of Evan Davies, was operated upon on the 2d March, 1832; but he will require a further operation before he recovers the use of that eye.

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M. DEMIAU CROUZILHAC, Professor of Criminal Legislation at the School of Law, died on Thursday of cholera. The celebrated chemist Orfila has had an attack of the cholera, but is better, and hopes of his recovery are entertained.

CHOLERA HOSPITAL OF M. BOEHR,  
BERLIN.

*Transfusion of Blood in Cholera*, by  
M. DIEFFENBACH; Cases recorded  
by Dr. SCOUTTETTEN.

*Case the 1st.*—Frederic Muller, aged 27, well-made. This man had been ill for seven hours and a quarter before transfusion was tried. Previous to the operation, the eyes were partly open, sunk in the orbits, and turned up; nostrils pinched; cheeks hollow; mouth partly open; tongue cold, as well as the whole face; respiration short and hurried; feet and hands of a violet colour; complete absence of the pulse; fingers much shrivelled; the patient was sensible.

The right jugular vein was then laid bare for the extent of an inch, opened longitudinally, and a quill-tube introduced. The blood was furnished by a young, robust physician, 28 years of age, from the median vein. An ounce and a half were then injected from a copper syringe, previously warmed.

At first, almost complete insensibility; then the patient made two deep and successive inspirations; the eyelids opened, and closed precipitately. Five minutes after the injection, convulsive motions of the head, which was drawn strongly backwards, followed speedily by convulsive action of the legs, arms, and of the whole body; cries and groans; features rapidly changing. These fearful phenomena lasted rather less than a minute when they suddenly ceased; the patient was dead.

The autopsy merely observed the alterations met with in other individuals, who have fallen victims to the epidemic.

*Case the 2nd.*—Widow Weber, aged 65, was admitted into the hospital of M. Boehr, at eight in the morning, having been taken ill during the night. She presented the following symptoms: eyes sunk, surrounded with a brownish circle; cheeks hollow; tongue cold; hands

and feet cold; pulse imperceptible; vomiting and purging seldom. She has vomited only once since her admittance into the hospital; is perfectly sensible; has not taken any active medicine since the attack, merely a vapour-bath.

Transfusion was performed by M. Dieffenbach at ten o'clock, the same day as the preceding case. The median vein of the left arm was opened for the extent of half an arm; very little blood issued; a quill-tube was inserted, which served to inject the blood of a young student, 23 years of age. At the first an ounce was injected without effect, when a second ounce was introduced. The patient then made two rather hurried inspirations, and there seemed to be a little agitation; she had some mint-tea, which she drank readily; she was asked if she was in pain, and she said, no.

The operator, being desirous of introducing a larger quantity of blood, opened the left jugular vein; and, in order to be certain, that there was not any obstacle to the course of the blood, a drachm of warm water was first injected; two ounces and seven drachms of blood were then introduced at twice, without producing any effect. The day passed quietly; the pulse did not return. She died at four in the afternoon, six hours after the operation.

*Case the 3rd.*—An old man, 61 years of age, was admitted with all the symptoms of cholera well marked; tongue cold, feet and hands blue, pulse totally gone; the disease commenced during the night.

At ten the operation was determined on, but it was deemed necessary to ascertain whether the circulation was going on; accordingly, after all necessary precautions against hæmorrhage had been taken, the brachial artery was laid bare for the extent of an inch in the lower third of the arm. The artery did not pulsate; and on an incision, five lines in length, being made in it, it was found, to the astonishment of all, not



to contain a single drop of blood, merely a small clot, like a thread; the arterial parietes were quite white.

The patient was perfectly sensible, spoke of the operation, and answered all questions properly; the tissues internally were as cold as the surface. Transfusion into the veins was performed immediately after this. The median and other veins in the forearm were full of black blood. The median being opened, two ounces and a half were thrown in at thrice. The patient did not complain of any thing, save a slight pain in the wound made to discover the artery.

After the third injection, the pulse re-appeared in the axillary artery on the other side, beating sixty to the minute, but only for five minutes. Although blood was introduced into the veins, none escaped by the opening in the artery. It was supposed that the iris contracted several times, and the features were more animated after transfusion.

This man died at noon, two hours after the operation, which did not appear to exercise any influence on the progress of the disease.

*Bulletin des Sciences Medicales.*

*Umbilical Hernia, of a remarkable shape.* By Dr. C. G. CARUS.

DR. CARUS describes an embryo of three months, with an umbilical hernia, the peculiarity of which consists in the development of a portion of the umbilical cord, very distinct, and about three lines long, between the abdominal parietes and the herniary sac, which contained the liver and the intestinal convolutions. This disposition is another proof in favour of the theory established by Professor Oken, namely, that the pretended umbilical herniæ in the fœtus are not really such; that the chylo-poietic viscera do not enter the abdomen until a certain period, in front of which is their situation in the first months of foetal life; and finally, that umbilical hernia is only an arrest of development.

*New Method of operating in Ectropion,* by Dr. DIEFFENBACH. — The instruments necessary for this operation, are a small straight scalpel, with a narrow one-edged blade, a double-edged curved scalpel, a pair of forceps, and insect needles.

The operation (we are detailing that for the lower eyelid,) is commenced by a semilunar cutaneous incision, which is made at some lines distance above the inferior edge of the orbit, directing the instrument from right to left, so that for the right eye the incision is commenced below the external; for the left, below the internal angle of the eyelids, supposing that the operation is performed with the right hand. This incision, which must be parallel with the inferior edge of the orbit, should be about two-thirds of the length of the eyelid, and exactly in the middle. When the incision has extended to the cellular tissue, the skin is to be detached for a certain extent from the tarsus, and the conjunctiva is then to be pierced, and the internal wound enlarged to the same size as the external. The conjunctiva and the tarsus which adheres to it, are then to be drawn through the external opening, a small portion of the conjunctiva being removed, the lips of the external opening are to be brought together, having between them the conjunctiva and the tarsal cartilage. This is to be effected by the finest insect needles, and threads twisted, as in the operation of hare-lip, after which the ends of the needles are to be bent, and cut close on the threads. The operation is the same for the upper eyelid.

Cold applications are made use of, and if necessary the antiphlogistic treatment. The needles may be removed between the third and sixth day. The method of operating is explained by plates.—*Rust. Magazin.*

*Instance of Longevity.*—At Ballydrach, near Cushendall, Archibald M'Cambridge, died on the 7th of June, at the patriarchal age of 123

years and 4 months. He was an industrious man, and during his life scarcely ever suffered one day's confinement from sickness; his habits were generally temperate, but by no means so abstemious as might be inferred by some people, from the great age he attained.

*State of the Blood in Jaundice.*—M. Lecanu states that the blood in icterus contains, besides the ordinary principles, 1st, an insoluble combination of albumen and soda; 2ndly, a similar combination, soluble; 3rdly, an orange-yellow colouring matter, combined with an oily substance; 4thly, a blue colouring principle.

As all these substances exist in the bile, there is reason to admit their presence in the blood.—*Journ. de Pharmacie.*

The Academy of Medicine gave a medal, value 500 francs, to the memoir in which this fact is contained.

*Medical Journal of Brazil, published at Rio de Janeiro.*

THE first number of *The Semanario de Sante Publica*, a weekly journal of public health, has recently issued from the press at Rio, and augurs well of the zeal and observation of the medical men there. It is indeed refreshing to the mind, to mark the benign influence which liberty diffuses over the intellectual, as well as over the moral energies of mankind; for while the parent countries of Spain and Portugal are oppressed with despotism, and sunk in apathy and indolence, these children of the New World are animated with a generous rivalry of scientific distinction. France, before the first revolution, had only one medical journal of any importance, and now she is the prolific mother of periodicals.—*Med. Chir. Rev.*

*A Sagacious and Important Reflection.*

WHEN we assemble a number of facts, and endeavour to draw legitimate inferences from them, we must

*weigh, not count* them. “Non numerandæ solum, sed etiam perpendendæ sunt observationes.—*Med. Chir. Rev.*

*Extraordinary Abstinence from Food.*

THE more that animals enjoy the qualities of youth, strength and activity, the greater is the increase and development of their parts, and the greater the necessity for an abundant supply of food. Of many individuals exposed to an absolute abstinence of many days, the young are always the first to perish. Of this the history of war and shipwreck offers in all ages too many frightful examples. There are several instances on record of an almost total abstinence from food for an extraordinary length of time. Captain Bligh, of the *Bounty*, sailed almost 4000 miles in an open boat, with occasionally a single small bird not many ounces in weight, for the daily sustenance of seventeen people; and it is even alleged, that 14 men and women of the *Juno*, having suffered shipwreck on the coast of Arracan, lived 23 days without any food. Two people first died of want on the fifth day. In the opinion of Rhedi, animals support want much longer than is generally believed. A civet cat lived ten days without food, an antelope 20, and a very large wild cat also 20; an eagle survived 23 days, a badger one month, and several dogs 36 days. In the memoirs of the Academy of Sciences, there is an account of a bitch, which having been accidentally shut up alone in a country house, existed for 40 days without any other nourishment than the stuff on the wool of a mattress which she had torn to pieces. A crocodile will live two months without food, a scorpion three, a bear six, a chameleon eight, and a viper ten. Valliant had a spider that lived nearly a year without food, and was so far from being weakened by abstinence, that it immediately killed another large spider, equally vigorous but not so hungry, which was put in along with

it. John Hunter inclosed a toad between two stone flower pots and found, it as lively as ever after 14 months. Land-tortoises have lived without food for 18 months; and Baker is known to have kept a beetle in a state of total abstinence for three years. It afterwards made its escape. Dr. Shaw gives an account of two serpents which lived in a bottle without any food for five years.—*Encyc. Brit. new edit.*

**PLAGUES.**—Chronologists and historians tell us that the whole world was visited by plague 767 years before Christ. Some of the most remarkable since the Christian era, are the following:—

Place.	Year.	No. destroyed.
London - - -	1347 -	50,000
Ditto - - -	1407 -	30,000
Ditto - - -	1604 -	$\frac{1}{4}$ part popula.
Constantinople -	1611 -	200,000
London - - -	1665 -	68,000
Bossorah - - -	1773 -	80,000
Smyrna - - -	1784 -	20,000
Tunis - - -	1784 -	32,000
Egypt - - -	1792 -	800,000
Smyrna - - -	1814 -	30,000

#### BOOKS.

**THE Effects of Arts, Trades, and Professions, and of Civic States and Habits of Living, on Health and Longevity;** with suggestions for the removal of many of the agents which produce disease, and shorten the duration of life. By C. TURNER THACKRAH, Esq. Second Edition, greatly enlarged. London. Longman and Co. Leeds. Baines and Newcome. 1832. pp. 238.

••• One of the most valuable and interesting works which has issued from the press for many years. It should be in the library, not only of every medical man, but also of every philanthropist.

**Statement of Facts, with Observations.** By DR. CRAIGIE, of Leith. 1832. pp. 25.

**The American Journal of Medical Sciences,** February 1832.

••• The Numbers for November 1831, and April 1832, have not yet been received.

#### NOTICES TO CORRESPONDENTS.

Mr. Ingleby's valuable communication in our next.

*Der Teufel.*—His Satanic Majesty, who from his signature, we judge to have lately returned from Germany, has honoured us by opening a correspondence, in which he most warmly urges us to fire on some hospital surgeons and physicians for some speculations of

which he accuses them. It is no new thing for the devil to cry out about sin, but we cannot allow our pages to be made the vehicle for his attacks, as we are not willing to come in collision with any one except on scientific subjects. *Donner and blitzen*, what the devil does he mean by sending them to us—is there not another periodical, the pages of which are especially consecrated (we beg pardon, desecrated) to such subjects? We consider his letter such an insult that we would positively call him out, but that we opine him to be a good marksman, as he is so well accustomed to fire. Marry, avaut thou evil spirit, hence with thee to the Red Sea.

Dr. Aldis's communication has been received.

Dr. Gordon Smith.—The papers promised by our correspondents will be received with pleasure.

Mr. Curtis's communication came to hand.

••• Circumstances have compelled us to omit the index and title-page this number; they will certainly be given next week.

The members of the profession, who consider the damages awarded in the case of *Ramadge v. Ryan* excessive, have commenced a subscription to enable the defendant to apply for a new trial.

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# London Medical and Surgical Journal

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VOL. II.

SELECTIONS  
FROM THE  
CLINICAL LECTURES,  
DELIVERED AT THE  
HOTEL-DIEU IN PARIS,

*During the Session of 1831-32;*

BY BARON DUPUYTREN,

PRINCIPAL SURGEON OF THAT HOSPITAL.

*On Fractures of the Lower Extremity of the  
Fibula, and Dislocations of the Foot.*

WEAKER than the tibia, and of the two bones, more exposed to external violence, nevertheless fractures of the fibula are less frequently observed. This may be explained by the kind of isolation in which it is placed, relative to the line in which the weight of the body is transmitted to the foot. The elasticity which this bone enjoys, even to the most advanced age, the slight degree of weight which it has to support for the greater part of its length, the protection it receives in front from the muscles which fill up the inter-osseous space and from the tibia itself, behind from the gastrocnemius and solæus, and externally from the lateral peroneal muscles, are so many circumstances which tend to weaken the effect of the violence to which it is subjected, and to diminish the frequency of its fractures. It must be added, however, that many of its injuries have been mistaken, that in many cases, they have been confounded with luxation of the tibio-tarsal articulation, so that they are, in reality, much more frequent than most authors say. I consider simple fractures of the lower extremity of the fibula to be in relation with other fractures of the bones in the leg as one to three.

Among the powers which cause fractures of the fibula, some exert an immediate action on this bone, others act by the intermedium of the foot; hence there are two kinds of

fractures, those which take place towards the middle and superior part of the bone, and those which occur near the malleolar extremity; these two kinds of fractures differ from each other in the triple relation of cause, effects, and the curative measures, necessary to be employed for their treatment.

The situation of the body of the fibula on the external side of the leg, the slenderness of this bone, the space which exists between it and the tibia towards the middle of the leg, the support which it receives from the tibia at its extremities, would lead us to believe that it ought to be more frequently fractured at the middle, but it does not happen so. Two causes tend to diminish the frequency of these fractures; the protection which the fibula receives from the lateral peroneal muscles, and the uncommon occurrence of circumstance capable of producing a solution of continuity by direct influence.

These fractures then generally follow direct shocks, such as those which result from blows on the fibula by contusing or cutting bodies, wounds from fire-arms, a fall, or the striking of heavy bodies against the external side of the leg. These do not require the employment of muscular force, they commonly occur without being preceded or followed by deviation of the foot, either inwards or outwards, and are cured in the majority of cases by repose, without being accompanied by any of those symptoms which so often complicate those which produce deviation of the foot. These fractures are remarkably analogous with those of the body of the ulna, which never occur alone, except under the influence of force immediately applied to the point where the fracture occurs.

A solution of continuity of the body or the superior part of the fibula, the tibia remaining uninjured, is not followed by any displacement in the length of the bone; the foot preserves its natural direction, and even a slight depression can scarcely be felt at the situation of the fracture. Thus the diagnosis of injuries of this nature may be rendered very obscure, especially if there has been

time for considerable tumefaction to form. The principal signs on which the judgment of the practitioner is to be formed, are the account given of the injury, the violence with which the blow was dealt, or the weight of the body which struck the limb, the existence of an extensive ecchymosis, of a severe contusion on the part which received the injury, and the facility with which a finger passed along the external surface of the fibula, presses the broken extremities in towards the tibia. Moving the foot, or the extremities of the bone, will seldom cause a crepitus, on account of the thinness of the fragments, and the exactitude of relation which they preserve.

Fractures of the body of the fibula are not accompanied with shortening of the limb, because the tibia serves in some measure as a splint. It very seldom happens that the case is at all serious, unless the soft parts have been much bruised. In simple cases nature alone is almost sufficient to effect a cure. The indications presented by a fracture of the body of the fibula are to keep the limb motionless by means of the bandage used in common fractures of the leg, and to treat properly the contusions or wounds with which it may be accompanied. The fracture becomes consolidated in thirty or thirty-five days, and generally without deformity.

But the solutions of continuity of the malleolar portion of the bone, which now claim our attention, are much more serious in their consequences. They were for a long while confounded with dislocations of the foot. Duverney and J. L. Petit are the first surgeons among the moderns who have mentioned it. Petit especially remarked that lateral luxations of the tibio-tarsal articulation could not take place without fracture of one or other of the malleoli. David, Fabre, Bronsfield, Pott, Ponteau, Boyer, Charles Bell, have since contributed by their observations to increase our knowledge of fractures of the lower extremity of the fibula. Nevertheless, the history of these lesions was still very incomplete, and the curative measures employed, were scarcely ever sufficient to prevent the deformities which they tended to produce, when I took up the subject, and rendered their treatment as efficacious as that of all other fractures.

The inferior extremity of the fibula may be broken, either by direct causes, similar to those already mentioned, or by forces acting on the foot, the effect of which is produced by *contre-coup*. The mechanism of fractures of the first kind does not present any thing very remarkable; that of the second, on the contrary, deserves to fix the attention of the practitioner, because it is very important to know the circumstances capable of breaking the fibula, in order to be aware, in doubtful cases of the possibility of the existence of such a lesion.

A stone, an excavation, or even a simple inequality of the ground, a fall from a more

or less elevated place on the feet, turned either inwards or outwards, are the most common causes of these fractures; they are the immediate results of the action of the weight of the body and of the muscular contraction acting suddenly on the inferior articulation of the leg, at the moment that the foot, carried inwards or outwards, is turned out of the vertical direction.

Let us now see by what mechanism fractures of the fibula may take place during the violent movements of the foot inwards or outwards. It is evident that in the two cases it is the change in the line of transmission of the weight of the body which is the cause of the rupture. In the first case, this line instead of traversing, as in the ordinary state, the axis of the tibia, and of falling on the astragalus, cuts obliquely from within outwards the inferior extremity of the tibia, the articulation of the foot, and is prolonged to the external side of that limb, after traversing the peroneal malleolus. The parts thus obliged to support the weight of the body, are then the external malleolus and the inferior extremity of the tibia; in this case, it is the malleolus externus, or rather the lower extremity of the fibula, which yields to the traction of the external lateral ligaments, a traction which is the more powerful, in that these ligaments are then in an almost perpendicular direction in regard to the malleolus, and that this latter rests on the sharp edge of the astragalus, which is forcibly pushed from within outwards by the tibia. This last bone, thicker and stronger than the fibula, generally resists, and if it happens sometimes that its malleolus is fractured, it is not primitively by the direct influence of the blow, but consecutively, and by the effect of the displacement of the foot outwards, in which case sometimes even the extremity of the tibia itself is fractured.

In the second case, that is to say, in the movements of the foot outwards, the centre of gravity of the body, instead of following the line according to which it is generally transmitted to that limb and thence to the ground, traverses obliquely the inferior extremity of the fibula, the articulation of the foot, the malleolus or the internal lateral ligaments, and falls on the ground at a greater or less distance from the internal side of the foot. These ligaments, and the malleolus to which they are attached on the one hand, and the inferior extremity of the fibula on the other, are then the parts which ought to sustain the weight of the body and the efforts of the muscles; these are either torn or fractured; the lateral ligaments and the internal malleolus primitively, and the external consecutively.

There are two orders of symptoms by which we can recognize the compound injury, which is at present occupying our attention; the one depending on the fracture of the fibula, the other on the luxation of the foot,

a distinction which should be well attended to, since the fracture of the fibula may sometimes occur without dislocation of the foot. These symptoms are of two kinds, presumptive and characteristic.

The presumptive signs are a peculiar sound or cracking noise, which the patient suffers at the instant of the injury, a fixed pain at the lower part of the fibula, difficulty or even the impossibility of walking, a swelling more or less great around the articulation of the foot, and especially around the external malleolus and the lower extremity of the fibula. The characteristic signs are a preternatural mobility and inequality at some part of the lower extremity of the fibula, a crepitus more or less evident by the effect of motion or pressure, the ease with which the fibula is brought near the tibia by pressing it against it, a change in the point of incidence of the axis of the leg on the foot, the deviation of the latter outwards, inwards, and sometimes backwards, its rotation on its axis from within outwards, an angular depression more or less marked at the external and inferior part of the leg, the projection of the internal malleolus, the disappearance of almost all these signs as soon as efforts at reduction are applied to the foot, and their immediate return when these efforts are suspended, especially if the limb is placed in a state of extension.

Let us now view these different symptoms in detail, and let us fix our attention especially on those which are characteristic. When the fibula is fractured, very remarkable phenomena supervene in the tibio-tarsal articulation. The external side of the mortise, which receives the astragalus, having lost its solidity, cannot offer sufficient resistance to the action of the muscles which tend to turn the foot outwards, and which are more powerful than their antagonists. Thus the external side of the foot is raised, the internal depressed, the dorsum is turned directly upwards, and the sole is directed outwards; the pulley of the astragalus is directed towards the internal malleolus, and sometimes makes a prominence there, which can be easily recognized through the integuments; the peroneal malleolus undergoes, on the contrary, a see-saw motion (*mouvement de bas-cule*) on the tibia, which raises it, and brings the upper end of that part of the fibula which it terminates near the axis of the limb. The foot is then externally to the centre of the inter-malleolar space; on prolonging downwards the axis of the tibia, it would fall on the internal side of the tarsus, and the weight of the body would be supported by the internal malleolus, and the ligaments which are attached to it. This displacement of the foot outwards is the only one which necessarily results from the solution of continuity of the fibula; the lower the bone is broken, and if the patient has endeavoured to walk on the injured limb, this distortion is more evident.

Even in the case in which the fracture was produced by a violent turn of the foot inwards, muscular action soon draws it outwards, and produces those changes in relation to the leg, already indicated.

When the fracture of the lower portion of the fibula is mistaken, muscular action continues gradually drawing the foot outwards, the astragalus is carried above the malleolus internus, the corresponding ligaments are put on the stretch, the distended soft parts become inflamed and diseased, and the synovial capsule being opened, caries attacks and destroys the articular extremities of the bones. In those cases, which are least unfavourable, the patients, not daring to trust the weight of the body to a weak, deformed, and painful limb, not to rest solely on the tibial malleolus and the internal side of the foot, are obliged either to use crutches, or to walk by means of a wooden leg. I have seen many cases which prove the unhappy consequences of mistaking fractures of the fibula.

It is then very important fully to ascertain the diagnosis of these injuries. When an accident has happened which is capable of producing such a fracture, the lower part of the leg and the tibio-tarsal articulation should be carefully examined. The presumptive signs doubtless appertain also to a simple dislocation, or are attended with rupture of the ligaments; but they also render probable the existence of a simple fracture. If there is any displacement, it is almost always possible to recognize it, by the inequalities produced by the broken portions at the situation of the fracture, and which are the more considerable the more extensive the displacement. On passing the finger along the whole extent of the inferior portion of the fibula, you will find, at the place where the fracture has occurred, an anomalous mobility, which may be readily distinguished from the elastic flexibility of the bone, and the existence of which will be rendered manifest by taking hold of the tibia with the four fingers of each hand, and making pressure successively with the two thumbs on each extremity of the broken bone. Crepitation is generally very slight, and often indeed it cannot be perceived. On taking hold of the lower part of the leg with one hand, and of the foot with the other, if the fibula is broken, the foot may be completely turned outwards and inwards alternately.

The first of the motions renders the internal malleolus projecting, withdraws the external from the centre of the joint, and the astragalus in some degree from the line according to which the weight of the body is transmitted to it; the other restores all these parts to their natural condition. Abandoned to itself, the foot is, as I have already said, inclined outwards; the internal malleolus makes a considerable projection, the integuments which cover it are stretched and tense; the axis of the leg falls on the internal side

the tarsus, instead of corresponding to its centre; the space which separates the two malleoli is enlarged; on the external side of the articulation the skin is wrinkled transversely; the external malleolus seems as it were sunk in; above it, and in the situation of the fracture, you may almost always observe a sudden depression from before backwards, resembling a *coup de hache*, which is a pathognomonic sign of fracture of this bone. This must not be confounded with the depression which the fibula presents immediately above the malleolus, and between the tendons of the anterior and lateral peroneal muscles.

In some cases, the force with which the injury has been inflicted, has turned the foot so strongly inwards, that it remains so, in spite of the fracture of the fibula; but then the upper end of the lower portion of the bone raises the skin, and appears as if it would tear it through; the inequalities of the fracture can be readily felt with the finger. After the reduction of the dislocation, the phenomena already indicated become manifest, and the injury cannot be mistaken. It is also characterized by the facility with which all the symptoms can be reproduced, after they have been made to disappear by placing the foot in its normal direction.

The prognosis of fracture of the lower portion of the fibula will depend on the symptoms which attend it. A simple fracture, readily recognized and methodically treated, seldom gives rise to accidents or leaves any deformities. Such can only be rendered dangerous through ignorance in mistaking it, or unskillfulness in not applying the most proper measures for its cure.

*Species and complications.*—Fracture of the fibula is divided into simple and complicated.

It is simple, when there is merely a solution of continuity of the bone, without any other injury. In this form it is exceedingly rare; it can only take place at a certain distance from the lower extremity of the fibula, and when the cause which has produced it, exhausted immediately afterwards, has been incapable of causing other injury, or when this has not been induced by any cause acting consecutively. It is very difficult to recognize so simple a fracture of the fibula; we can only be guided by the presumptive signs already spoken of.

One of the most frequent causes of the infrequency of this kind of fracture is assuredly to be found in the efforts which the patient makes, immediately after the fall, to raise himself up, and endeavour to walk. It has occasionally lost its character of simplicity, a long while after the accident, by the imprudence of the patient, who, tired of the bed, rises and walks, supporting himself on the injured limb. Hence you will readily perceive the vast importance of perfect quiet and rest in these cases. By observing these, with resolving applications, a perfect cure may be obtained in a short time.

This species of fracture presents two varieties; in the first, the fibula is fractured at rather more than three inches above the external malleolus; it is distinguished from all other species, as it does not and cannot give rise to distortion of the foot. This impossibility especially depends on the length of the inferior fragment of the bone, and the integrity of the tibio-peroneal ligaments. It is generally met with in fractures from a cause acting directly, and very seldom in those dependent on a cause acting indirectly. The reason is that the production of this is always preceded by a more violent movement, and even a displacement of the foot, either inwards or outwards. There is seldom any danger from this variety, which requires only repose and semi-flexion of the limb to effect a cure. The second variety consists of all the cases in which the fibula has been fractured at less than three inches above the malleolus, and without displacement of the foot. It may take place at any part of the three inches spoken of, but when the limb has been forcibly carried outwards it is met with most generally at two inches and a half above the malleolus, because the fibula, weaker and more slender at that point than anywhere else, and bent inward by the weight of the body, and the action of the muscles, offers the least resistance. If, on the contrary, the foot has been bent powerfully inwards, it takes place ordinarily below this point, and on the part of the bone which is lodged in the articulating cavity of the tibia. That which particularly distinguishes this variety from the preceding, is the facility with which the foot can be displaced.

The complications of fracture of the fibula are numerous, and make it much more serious than it is of itself. For example, let any cause carry the foot violently outwards, the efforts of extension and flexion which fracture the fibula exert their power first on the soft parts of the internal side of the articulation and of the lower extremity of the bone, and produce a rupture of the internal lateral ligaments, and separation, or even a fracture, of the internal malleolus. If the fracture take place by a movement of the foot inwards, and the individual afterwards endeavours to walk and support himself on the foot, it will be carried outwards, and the same accidents may happen. Here we have one complication. Sometimes, instead of the lateral ligaments and the internal malleolus, the inferior extremity of the tibia is fractured. The solution of continuity, whether it has preceded or followed that of the fibula, is almost always oblique, and accompanied with displacement of the foot. A third complication, very generally met with, save in those very rare cases to which I have already alluded, of simple fracture, is the luxation of the foot. This may take place in several ways—inwards, backwards, outwards, and finally outwards and upwards. The first is

so common, it is so closely connected with the existence of fracture of the fibula, that the one is seldom found without the other, and it is one of the most certain signs; it consists in a dislocation of the head of the astragalus, which is carried below, and to the internal side of the tibial malleolus, a displacement which is only the prolonged effects of the action of the causes which produced the fracture, or else a consequence of the action of the abductor muscles of the foot. The second is owing to the action of the gastrocnemius and soleus muscles; these, acting on the foot, which is no longer retained by the resistance of the external malleolus, make the astragalus glide from before backwards on the lower extremity of tibia, and cause the lower end of the fibula to execute a movement by which its lowest portion is carried backwards and the other brought forwards.

The third species of luxation is one of the most rare, and the most difficult to be explained. The astragalus is carried to the side of, and below the peroneal malleolus, while the external edge of the foot is turned downwards, the sole inwards, and the internal edge upwards; the tibial malleolus disappears between the foot and the leg, and the peroneal malleolus forms with the astragalus a projecting angle, rounded externally. According to these dispositions the foot presents the appearance of a real congenital varus. In endeavouring to account for the cause of this extraordinary displacement, I examined successively the organization of the lower end of the inferior extremity, the relative action of the powers of antagonism and equilibrium, and the effects resulting. On the one hand, in the state of repose and sleep, in vari, and the majority of the *faux pas*, and the dislocations which are the consequence, the foot being constantly directed inwards and the astragalus outwards, the displacement of these parts appear to take place almost always in the same direction as a consequence of fracture of the fibula, and of the lower extremity of the tibia. On the other hand, it results from the study of the respective power of their antagonist muscles, that, in the majority of cases the abductors are more powerful than the adductors; thus we perceive that the external edge is generally turned outwards and the astragalus inwards, whether there is fracture of the malleolus and inferior extremity of the fibula, or of both malleoli at once and at the same height. Finally, in fracture of the tibia only, at its extremity, although the foot has no longer any support from within, and preserves on the contrary that which the fibula and its malleolus furnish, there is nevertheless almost always more or less evident displacement of the astragalus inwards, which can only be attributed to this superiority of the abductors over their antagonists. From all these considerations, we must necessarily

conclude that luxation of the foot outwards (in which the astragalus is carried outwards and the foot inwards) can take place only from a very peculiar and very rare disposition of the parts. Reason and observation have taught me that this consists in an obliquity of the fracture of the tibia, or in the more or less great resistance offered by the lower fragment of the fibula; the obliquity of the first influencing the direction in which the displacement occurs, and on the muscles capable of producing it; the resistance of the second preventing the foot being carried outwards, and consequently favouring the action of the abductors.

The last species of luxation, that of the foot outwards and upwards, which has never been described, I have observed only once, during a practice of fifteen years, out of more than two hundred cases of fracture of the fibula, which I have treated. But it was so well characterized, that it is impossible to deny its occurrence, or mistake it in future. In this species the astragalus, at first dislocated outwards, ascends on the external surface of the tibia. In the case to which I have alluded, the astragalus, the external malleolus, and the foot, were at first dislocated to the external side of the leg, and afterwards ascended on it two inches high, without ceasing to form a compound body, firmly bound together as in the natural state of the parts. From this it may be readily perceived, that this luxation cannot take place without the occurrence of both fracture of the fibula, and complete tearing of the tibio-peroneal ligaments.

If the fibula is fractured in several points and directions at once, which happens principally from the effects of a very severe blow crushing the parts, or from the wheel of a coach going over the inferior and external part of the leg, a comminuted fracture will be the result, with dragging, tearing of the soft parts, of the nervous, tendinous, aponeurotic, or cutaneous structures, and consequently these injuries will give rise to pains, inflammation, the formation of abscesses, eschars, convulsive movements, a tetanic state of the muscles, &c. which place the life of the patient in danger, and render the treatment long and difficult.

But this species of complication, however serious it may be, is not to be compared to that which results from the disorders which are concealed by the skin. These are such sometimes, as would tempt us to despair of repairing them, if experience had not taught us that they can be often perfectly cured, and in a short time. Thus we find the tibia and fibula fractured, either both at once or separately, with numerous sharp splinters driven into the flesh; the articulation opened, and its cavity full of blood, mingled with synovia; the internal lateral, the tibio-peroneal, and external lateral ligaments, torn more or less unequally; the tendinous sheaths



laid open; the tendons and nerves distended, twisted, compressed, displaced, elevated, partially or totally divided; the arteries and veins, and especially the internal saphena vein, compressed, ruptured, and surrounded with effused blood; the cellular tissue torn in every direction, and filled with a reddish serum, and more frequently with blood, which is infiltrated to the toes, in one direction, and as far as the knee in the other. If to this, you add the displacements to which the osseous structures are subject, you will even then have but a feeble idea of the derangements to which a fracture of this species may give rise.

The arteries or veins may be injured alone without the formidable ensemble of symptoms which I have just enumerated, and give rise to an infiltration of blood in the cellular tissue, or to an effusion of this fluid into pouches, more or less large, formed at the expense of the ruptured cellular tissue, which intervene between the soft parts, surround the fragments of bone, extend around the articulation, and even penetrate into its cavity. This kind of lesion constitutes a new species of complication, one of the most common, besides, of fractures in general, and of the fibula in particular; it deserves especial attention in consequence of the serious accidents which follow, and the treatment which is proper for it.

It happens very commonly that the skin has been removed, or opened in one or more places, by the extremities of the broken bone; these openings, generally irregular, with torn, contused, and disorganized edges, sometimes closely surround the bone, and keep it protruded, sometimes are free, and allow of the passage of black blood, or pieces of half disorganized flesh and tendon. They are produced in several ways; either primitively, as I have just indicated, or consecutively, as the effect of inflammation, the separation of sloughs, or by a work of elumination, by which nature endeavours to get rid externally of blood, pus, or any thing else, which has become a foreign body in the system. These lesions of the integuments are another complication so serious in their effects, that fractures of the least consequence otherwise, may become exceedingly dangerous, whilst we ought never to despair of a cure of internal disorders, however extensive they may be, while the skin remains whole. The most dangerous are those which are produced immediately by the fracture, on account of the violent inflammation which ensues, the pain, the fistulæ, the denuding of parts, necroses, and a multitude of other injuries, which result from the formation and infiltration of pus.

The tumefaction, tension, and strangulation which follow fractures, are different degrees of the same complication, and the result of the afflux of blood which takes place on the nervous, fibrous, and other

parts, which are distended, stretched, or torn by the bones, and the displacements which they undergo. When these symptoms are not dissipated early, the tumefaction and tension may acquire, in a few hours, a high degree of intensity, and cause great danger; phlyctenæ, filled with a reddish serum, may form here and there, the limb become cold, livid, and insensible; and if the disease cannot be arrested at this period, strangulation takes place; the excessive distention of the external, and the no less compression of the internal, bring on gangrene, and the limb dies either partially or totally. The development of these phenomena becomes complete, without any of the characters of inflammation being observed, which is doubtless owing to the rapidity with which it occurs. But in other cases inflammation succeeds the afflux I have mentioned, and then it may take either of two different courses—one in which the symptoms gradually increase the pain, redness, heat, tumefaction, and tension, the local and general fever, are carried to their height, and followed, as in the preceding case, with numbness, lividity, and icy coldness of the limb, cessation of the pain (at which the patients, not knowing its cause, rejoice), and gangrene. The skin, and sometimes cellular tissue, tendons, nerves, ligaments, and even occasionally the whole foot, are deprived of life. Sometimes this inflammation presents itself under the form of a slight erysipelas phlegmonodes, which progresses rather slowly; but, at the end of a few days, the symptoms are aggravated, the fever increases, the tongue dry, diarrhœa supervenes; an obscure fluctuation may be soon felt here and there under the skin, crepitation of elastic fluids; phlyctenæ make their appearance under these sloughs, which open and give issue to a mixture of pus and elastic fluid. The sub-cutaneous cellular tissue dies; the skin is detached to a greater or less extent; slow fever establishes itself, the strength wears out, and the patient, exhausted by the fever, the suppuration, and the diarrhœa, perishes sooner or later.

The displacement of the bones, the tearing and distention of the parts, determine and keep up a secondary, permanent pain, which the inflammation increases, which is accompanied by fever, insomnia, agitation, and which, by its intensity, or the peculiar sensibility of the individual, or of his constitution, may cause even convulsions and tetanus. The first of these accidents disappears as it were by magic on the reduction of the fracture, according to the proverb, *sublatâ causâ, tollitur effectus*. But when tetanus has once commenced, it resists the most energetic measures, and amputation even will rarely remove its effects.

There is another complication of the fractures of the fibula, and of surgical affections in general, which is too important to pass over in silence; it is the *nervous delirium*. To

this I have devoted an entire lecture. If, by the perforation or destruction of the flesh, the bone is exposed immediately to the air, or if inflammation and suppuration break through the parts which united the splinters to the living bone, or separates the periosteum from them, they perish, and necrosis takes place, another complication of fractures of the fibula. Nevertheless this necrosis is rare in the fragments of the broken fibula, but very common, on the contrary, as regards the tendons at the lower part of the leg. These tendons are most exposed to the disorders which the fracture causes. It does not take place immediately, but after a shorter or longer time. Pain, redness, heat, tumefaction, tension, and obscure fluctuation in the course of the affected tendons, supervene; the skin thins and ulcerates; the pus escapes by these openings, and filaments continually pass away until all that has been destroyed by necrosis has been expelled. Finally, the last complication of fractures of the fibula, which frequently occurs, when they are followed by inflammation, is an adynamic affection which, according to whether it is true or false, essential or symptomatic, requires a treatment so different, that the safety of the patient almost always depends on the distinction which is made.

In my next I shall describe the treatment of these cases.

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ON THE INDUCTION OF  
PREMATURE LABOUR,

AS APPLICABLE TO MATERIAL DEFORMITIES OF THE PELVIS.

By J. INGLEBY, Esq.

*Lecturer on Midwifery at the Birmingham School of Medicine.*

IMPROVEMENTS in midwifery have advanced by very tardy steps. Several valid reasons might be adduced in support of this assertion, but the present state of the art and its past defects, may be sufficiently explained by the little protection which it has hitherto received from those authorities who preside over the other branches of medicine, and who ought to be equally the guardians of this. That the public weal would be most materially promoted, by extending to midwifery a protection equivalent to that which has been claimed for the other departments of science, is too plain to admit of controversy. At one period the practice of midwifery, in the higher ranks of society, was in a great measure given up to patronage. At present, the science seems to be an alien, and men have actually been found, I think senators not excepted, who have zealously advocated the wisdom of consigning the pursuit altogether

to chance, and discountenancing all kinds of security. In days when medical practitioners were "few and far apart," this doctrine had some claims to consideration: At the present time, when an inadequate supply of medical men can no longer be pleaded, opinions so visionary and untenable must necessarily yield to the force of argument. Difficulties, indeed, may be raised respecting the midwife. But it cannot be denied that a certain measure of instruction ought to be imparted to every person, whether male or female, who professes the art, otherwise "cui bono"—the good is not even problematical—the evil most glaring. Far better to consign a labour altogether to nature, than sanction interference by the most illiterate and ignorant of human society. But notwithstanding the prejudices and obstacles which attach to the art, important improvements have been made from time to time in its practical parts. On one of these, viz. the induction of premature labour, I wish to offer a few observations, rather with a view to an examination of a subject so deeply interesting, than a mere detail of the cases upon which the observations are founded. The communication of two or three additional instances to those already on record, can claim but little interest and less still when it is known that they were unsuccessful. But a man who has the interest of science in view, will faithfully and impartially report the result of his experience, whether gratifying or discouraging. The early history of this operation is short. It having been observed, that infants born about the seventh month were enabled to live, in the case of women who invariably gave birth to dead children, when gestation was extended to the full term, and also from observing the difficulties and dangers attendant upon the delivery of women having high degrees of deformity of the pelvis, a consultation of the most eminent obstetricians was held in London, some years ago, to determine whether it was justifiable, and not in opposition to the divine laws, to bring on premature labour in persons so unhappily circumstanced. The decision was in the affirmative. This operation is required, chiefly on account of the contracted state of the superior strait of the pelvis, and it is argued as a general rule, that if the promontory of the sacrum is not easily felt when the finger is passed high into the vagina, that the deformity cannot be material. This opinion is not strictly correct. In the second case, to which I shall presently refer, the promontory of the sacrum was found to project both inwards, and so far obliquely upwards, that its apex could not be felt until the hand was passed into the vagina, and yet the space which intervened between pubes and sacrum, does not apparently exceed two inches and a half in the short diameter of the brim.

To the medical attendant this operation is inseparable from the deepest responsibility. The operation, as involving a moral question, cannot fail to inspire the husband, if he possesses either an affectionate or a cultivated mind, with feelings of a very peculiar, not to say painful, kind; and in the instance just alluded to, the husband adverted to his state of mind and moral obligations, in a manner creditable in the highest degree. In the mind of the patient, the proposal excites dread on account of its unnatural character. A woman to whom I was twice called in labour, to assist in cephalotomy, discarded her usual medical attendant simply because he suggested the expedient for her consideration, in the event of her again becoming pregnant. Something may be urged against the operation, but still more in its favour. It has met with objections on three principal grounds. 1st, That it is contrary to laws both human and divine. This objection is easily met. We have no injunction in Scripture to forbid such a measure, and no authority to countenance it. If this argument were allowed to prevail, no operation whatever could be permitted. To legislate upon this particular point would be quite out of the question. 2ndly, That it is not to be relied upon, either as respects the welfare of the parent or child, a statement entirely at variance with the results of experience. 3rdly, On the ground that it may be turned to the worst of purposes by ignorant or wicked persons. But surely we cannot recognize an objection proceeding from the abuse of knowledge only, since the same argument is equally applicable to every department of science. And, 4thly, several minor objections comprising the chance of a preternatural presentation; of the child's limbs being fractured; of pressure on the chord; and an incorrect reckoning; but the three first apply equally to the full period, and the last must be provided for by allowing the most extended period of time compatible with the safety and success of the measure. It is to be recommended on two grounds. It prevents much fruitless suffering to the parent, and occasionally preserves the life of the infant. In sacred history, as we have already remarked, nothing is stated to warrant any important operation in parturition. The destruction of a living infant, though tolerated by custom, and sometimes justified also by necessity, is an operation most truly revolting to human nature, and never to be performed but from the direst necessity. The main object proposed by the induction of premature labour is to supersede so barbarous an operation.\* Of the records

of this operation, which furnish us with about 100 cases, it seems that Dr. Hamilton succeeded in saving 23 infants out of 27 cases; of Barlow's 17 cases, 6 children were born dead, 6 survived, and 5 died; of Denman's 12 cases at least half were preserved; of Merriman's 47, 26 were born dead, 5 were born alive but soon died, and 16 were born alive and reared. Of this number nearly one half were preserved, a result very encouraging. To justify this operation a combination of circumstances are essentially requisite. Experience must have proved that a living child cannot pass un mutilated at the ninth month; and though much will depend upon the bulk of the fetus, and the degree of ossification of the fetal cranium, we can only act on general principles. Seven full months must have elapsed, or rather the operation should be performed early in the eighth month, or about six or seven weeks before the full period of pregnancy. The period might be somewhat influenced by the degree of contraction of the pelvis, and the presumed size of the child. According to Dr. Merriman's table it is inferred, "that conception is effected soon after the catamenial period has intermitted, more commonly than immediately before the recurrence of that discharge."

There must also be a clear space of two inches between pubes and sacrum to warrant it. The patient's general health and strength must be adequate to the delivery, and the presentation natural. A wet nurse should be provided for the infant. Some remarks might be made here respecting the induction of premature labour in cases of very dangerous vomitings, or diseases of the viscera; but having referred to these points in my recently published work on *Uterine Hæmorrhage*, points which were also critically examined in the *Medical and Surgical Journal*, I need not recapitulate what has been so recently discussed. The varying measure of success which has attended the induction of premature labour in the hands of equally competent practitioners, leads me to ask what is the cause of this difference? Is it owing to the mode in which labour is brought on? The object of this proceeding is to provoke uterine contraction adequate to the expulsion of the child and secundines. Which then is

when cephalotomy is really necessary the forceps might be used, coincides with the French and Americans, (apart, however from theology, and the question of baptism altogether.) At some convenient opportunity I may perhaps state the results of my observations, which are in this instance opposed to the opinions of Dr. Ryan, contained in his very excellent and talented Manual. I cordially enter into all the objections to the perforator, so ably stated by Dr. Beatty in his paper in vol. i. part i.—*Dublin Medical Transactions*. New Series, page 41.

\* It would occupy too much space, and be somewhat irrelevant, to enter into an examination of the comparative merits of the long forceps, the perforator, and the Cæsarean operation. Dr. Ryan, who believes that

the most eligible mode of accomplishing it? Two principal plans have been proposed: the first is to dilate the os uteri and evacuate the liq. amnii; the second is in like manner to dilate the os uteri and detach the membranes from the inferior part of the womb without risking the discharge of the waters. Hæmorrhage is not likely to arise, on account of the fineness of the vessels; but in either case the mucous plug is necessarily disturbed. There is another plan which, on the authority of Dr. Power, is said to provoke uterine action in cases of hæmorrhage, equal to the expulsion of the ovum. Admitting that the tendency of all hæmorrhages before delivery is to promote contraction, the proceeding can scarcely be considered (*cæteris paribus*) less applicable when the functions of the womb remain unimpaired. This plan consists in dilating and irritating the os uteri, but not disturbing the membranes at all, and applying strong frictions over the abdomen. Respecting the first plan, I scarcely need observe, that whilst it provides for the certainty of labour ensuing, it has many disadvantages which do not attach to the second. If it be determined to rupture the membranes, I certainly would recommend a gradual dilatation of the os internum, and perhaps several cautious attempts may be requisite for the purpose. If the os uteri be well dilated previously to the rupture of the membranes,\* the sudden evacuation of the waters will be advisable in order that labour may be rapidly completed when the pain ensues. If the waters are discharged before the os uteri is dilated, the more gradual the evacuation of the fluid, the less will be the degree of pressure on the child, and the more likely it will be to survive. The advantages of the second plan consist in the membranes remaining entire, by which the labour is not only rendered nearly natural, but the pressure which is exerted upon the body of the infant is neither so long-continued, nor yet so closely applied, as to interrupt the circulation. Under contrary circumstances, the intention of the operation, as it respects the child, would be entirely frustrated. Moreover, should the breech or arm present, the importance of the membranes being entire must be quite obvious. The third plan I have not yet had an opportunity of trying, but Dr. Power, in an obliging communication, assures me that it never fails to produce uterine contraction, and supersedes both turning the child and rupturing the membranes in those cases of hæmorrhage which demand the prompt evacuation of the uterus.

As to the second and third plans, one sug-

\* I prefer a long probe, knitting pin, or a silver wire with a rounded head, to the sharp-pointed instrument which acts with a spring and is sold for this purpose; the female catheter is ineligible.

gestion only can arise; can they be relied upon confidently to promote the intended contraction? But admitting their uncertainty, no rational objection can be made against a trial; and in case of failure, then the membranes may be ruptured after an interval of two or three days. The pain of passing the hand into the vagina, dilating the os internum, can scarcely constitute a serious objection; and if the os uteri does not close again, an improbable event (though I once knew it happen) whilst we can rupture the membranes with increased facility, we prepare the uterus for a more speedy expulsion of the child. Labour pains will generally ensue within forty-eight hours; but this will be governed very materially by the state of the os uteri when the waters are evacuated. If the membranes are simply detached, the probable time when labour will ensue can only be surmised.

*Case 1st.*—I was summoned by the midwife of the dispensary to Mrs. Edes, a stout but very short woman, somewhat advanced in years, and in labour of her first child in consequence of præternatural presentation. Very great difficulty I understood had attended the successive evacuation of the limbs, breech, and shoulders, but the head remained immovably fixed at the brim. As the child was certainly dead, the head was opened with the concurrence of my then colleague, Mr. Vickers (now retired from practice), and after much exertion its delivery was effected. The deformity was now found to be such as warranted us in recommending the induction of premature labour in the event of a subsequent pregnancy. This recommendation was carried into effect. I punctured the membranes, and the labour was comparatively easy, but the child was born dead.

*Case 2nd.*—This case occurred in a short and rather stout woman. I rely on her own testimony for the accuracy of the history of her case up to the time when I first saw her. She is 34 years of age, and has had ten children. Cephalotomy was performed in the first labour by Dr. Merriman, in consequence of deformity of the brim of the pelvis. Premature labour was brought on by this eminent practitioner after the seventh month. This child is now living. She went her full time of the third child, and cephalotomy was had recourse to by Dr. Henry Davies; in the fourth, fifth, sixth, and seventh pregnancy, this gentleman induced premature labour; one of the children lived nine days, one merely breathed, and the rest were still-born. Premature labour was again induced in the eighth pregnancy by a surgeon in the country. This proved to be a breech case, and the child perished during the delivery. In the tenth pregnancy she applied to me to resort to the same expedient, and strengthened by the above eminent authorities, I did not hesitate to comply with the request. I have already remarked that the promontory of the

sacrum was directed inwards, and obliquely upwards, and the os uteri was not distinguished without some difficulty, being turned upwards and inwards, directly opposed to the sacro-iliac symphysis: these points were also ascertained by my friend Mr. Middlemore. Having introduced my hand into the vagina, and my finger through the os uteri, desirous of preserving the membranes entire, I merely detached them about an inch in circumference. After the lapse of four hours, the membranes unhappily gave way under a trifling action of the uterus; the pains continued progressively increasing, and the child was born dead, forty hours after the operation. The mother ceased to feel the fetal movement twelve hours before delivery. The child was nineteen inches in length, five pounds and three quarters in weight, and the head was eleven and three quarter inches in circumference. If the operation had been performed eight weeks before the completion of the full term instead of six weeks, I think the result might have been different, and had the membranes not ruptured so prematurely and unexpectedly, I have no doubt the issue would have been successful. I am rather confirmed in the opinion that the seventh month would have been the most eligible time, from the circumstance of the child being small when born, whilst those which were still-born were of a much larger size. The third case connected with visceral disease is detailed in my work.

I again beg to say that my object in sending you this paper is in the hope of drawing attention to the most approved plan of accomplishing the object, so as to afford the child the best chance of surviving.

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THE  
ANATOMICAL EXERCITATIONS  
OF  
WILLIAM HARVEY, M.D.

(Continued from page 789.)

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CHAP. VIII.

*On the abundance of blood passing through the heart, out of the veins into the arteries, and on the circular motion of the blood.*

THUS much of the transfusion of the blood out of the veins into the arteries, and also how it is disposed of, and in what manner it is transmitted by the pulse of the heart, and how it is disposed of. Some of those that were perchance moved by the authority of Galen, Columbus, and others, will yield now to me. But as concerning the quantity and increase of this blood, which passes through, those things which remain to be mentioned, though they are very considerable, yet when I shall speak of them, they are so novel and

unheard of, that I not only fear mischief which may originate to me from the envy of some individuals, but I likewise expect that every man almost will prove to be my enemy, so much does custom and doctrine once received and deeply rooted [as if it were another nature] prevail with every one, and the venerable reverence of antiquity enforces it. Nevertheless my resolution is now fixed, and my hope is in the candour of those who love truth, and those who imbibe the learned doctrines. When I had often and seriously considered with myself, what great abundance there was for experiment, both by dissection, and examination of living things, and the opening of arteries, and many ways of searching; and then from the symmetric form and magnitude of the ventricles of the heart, and of the vessels which enter and depart from it (since nature making nothing in vain, did not intend that greatness proportionably to no purpose, to those vessels), as likewise from the continued and careful artifice of the valves and fibres of the heart, and the rest of the fabric, and also from many other things; when I had, I say, considered alone all these things, and what a great abundance of blood was transmitted through these various organs, and in how short a time that transmission was completed; it was then to be determined whether or not the juice of the nourishment which we receive could have furnished that process. At last I perceived that the veins should be quite emptied, and that the arteries on the other side would burst with too much blood, unless it did pass back again by some way out of the veins into the arteries, and then return into the right ventricle of the heart. I began to think the blood might not have a circular motion, which afterwards I discovered to be the case, and that the blood was sent forth forcibly and driven out of the heart by the arteries into the body and all parts of it, by the pulsation of the left ventricle of the heart, as it is driven into the lungs through the vena arteriosa by the pulsation of the right ventricle, and that it does return through the little veins into the vena cava, and from thence into the right ventricle of the heart, as it does likewise out of the lungs through the above-mentioned arteria venosa to the left ventricle, as already mentioned.

Which motion we may call *circular*, after the same manner that Aristotle says, that the air and the rain imitate the motion of the superior bodies. For the earth being wet evaporates by the heat of the sun, and the vapours being raised are condensed and descend in showers, which makes the earth wet; and by this means here are generated tempests, and likewise the beginnings of meteors, from the circular motion of the sun, and his access and recess.

It then comes to pass that all the parts in the body are nourished, cherished, and quick-

ened with blood, which is warm, perfect, vaporous, full of spirit, and I may also add alimentative, or nourishing. In some parts the blood is refrigerated, coagulated, and formed, as it were, barren; from thence it returns to the heart, as if to the fountain or reservoir of the body, in order to recover its perfection; and there again, by natural heat, powerful and vehement, it is melted, as it were, and from thence is dispensed again through the body, being impregnated or tinctured with spirits, as with balsam, and that all the things do certainly depend upon the motion and pulsation of the heart.

So that the heart is the beginning of life, the sun of the microcosm, as proportionably the sun deserves to be called the heart of the world, by whose virtue and pulsation the blood is circulated, increases, and is defended from corruption and grumefaction; and this familiar household god (*Lar*) performs his duty to the whole body, by nourishing, cherishing, and vegetating, which is the foundation of life, and author of all. But we shall speak more conveniently of these things when we speculate on the final cause of this motion.

Hence it is, seeing that the veins are certain ways for the purpose of carrying blood, there are two sorts of them; firstly, the *cava*, and, secondly, the *aorta*; not by reason of the size (as Aristotle says), but by their function, and not as it is commonly said, by their constitution, seeing in many creatures (as I have said), a vein differs not from an artery, in the thickness of the tunic, but easily to be distinguished by their use and employment. Both a vein and an artery, not undeservedly called veins by the ancients, as Galen has observed, because that the artery is a way which carries the blood from the heart into the habit of the body, the other a way of carrying it from the habit of the body back again into the heart. This is the way from the heart, the other the way to the heart; which blood is newly formed, unprofitable, and now made unfit for nutrition; the former blood being digested, made perfect, and alimentative.

#### CHAP. IX.

*That there is a circulation of the blood, from the first supposition being confirmed.*

But lest any one should imagine that we were wrong in our opinions, and bringing forward only specious assertions, without any ground, and made an innovation without just cause; first, there come three things to be confirmed, which being proved, I think the truth of our assertion must needs follow, and be apparent to all men.

Firstly, then, that the blood is continually, and without any intermission, transmitted out of the *vena cava* into the arteries, in so great abundance by the pulsation of the heart, that it cannot be made stronger by the ingesta, and therefore that the whole mass of blood would quickly pass through.

Secondly, the blood is continually, equally, and without cessation, driven into every part of the body, and enters by the pulsations of the arteries, and in a far greater abundance than is necessary for nourishment, or than the whole mass of blood is able to furnish.

And, thirdly, that the veins themselves do perpetually bring back this blood into the heart, from the limbs. These things, then, being proved, I think it will be apparent to all that the blood does go round, is returned, thrust forward, and comes back from the heart into the extremities, and from thence into the heart again, and so makes, as it were, a circular motion. Let us suppose how much blood the left ventricle contains in its dilatation, when it is full, either by our imagination, or by experiment in quantities of ℥ij. or iij. of blood, which I have found in a dead man.

Let us likewise suppose how much less this is in the contraction, or when it does contract itself, how much the heart may contain, and how much less capacious the ventricle is, and then consider the quantity of blood that is thrust out into the *arteria magna*; for in the systole there is always some thrust forth, which was demonstrated in the third chapter, and all men acknowledged it, being induced to believe it from the fabric of the vessels; by a very probable conjecture then, we may aver that of this, there is sent into the artery a fourth, or fifth, or sixth, at least an eighth part.

So let us imagine that in a man there is sent forth in every pulsation of the heart, an ounce and a half, or three drachms, or one drachm of blood, which by reason of the impediment of the portals cannot return to the heart.

The heart in one half hour makes above a thousand pulsations, yea in many, and at some times, two, three, or four thousand; now multiply the drachms either a thousand times, or two drachms, or five hundred ounces, or such a proportionate quantity of blood, transfused through the heart into the arteries, which is a greater quantity than is found in the whole body. So likewise in a sheep or a dog, if there happens (which I grant ye) but one scruple, in one half hour there passes a thousand scruples, or about three pounds and a half of blood; in whose body for the most part is not contained above four pounds of blood, for I have tried it in a sheep. Our account being almost laid, according to which we may guess the quantity of blood which is transmitted while counting the pulsations, it seems that the whole mass of blood does pass out of the veins into the arteries through the heart, and likewise through the lungs. But grant that this is not done in half an hour, but in a whole one, or in a day, be it as you will, it is manifest that more blood is continually transmitted through the heart, than either the food which we receive can furnish, or is possible to be contained in the veins. Nor

is it to be said that the heart in its contraction does sometimes thrust out some, oftentimes nothing, or something imaginary. This I refuted before, and besides it is against sense and reason; for if in the dilatation of the heart, it must needs come to pass that the ventricles are filled with blood, it is likewise necessary that in its contraction it should always thrust forth some blood, and that not a little, seeing that the canals are not small, and the expulsion not seldom. It is likewise very convenient in every propulsion; the proportion of the blood thrust out should be a third part, or sixth part, or eighth part, in proportion to that which was contained in the ventricle, and which filled it in its dilatation, according as the proportion of the ventricle being contracted, as also in proportion when it was not contracted; and as in its dilatation it never happens, that it is ever filled with nothing or something merely imaginary, so in its contraction it never expels nothing, or that which is imaginary: but it always expels something according to the proportion of its contraction.

Wherefore it is then to be concluded, that if in a man, an ox, or a sheep, the heart doth send forth one drachm, and there be a thousand pulsations in one half hour, that it shall happen in the same time, that there shall be ten pounds and five ounces transmitted, if at one pulsation it sends forth two drachms, twenty pounds, and ten ounces; if half an ounce, forty-one pounds and eight ounces; if an ounce, eighty-three pounds, and four ounces will, I say, be transfused through the body in half an hour out of the veins into the arteries. But it may perchance be, that I shall set down here more accurately how much is thrust out at every pulsation, when more and when less, and for what reason, which information I have gathered from many observations. In the mean time this I know and declare to all men, that sometimes the blood passes in less, sometimes in more abundant quantity, and the circuit of the blood is performed sometimes quicker, sometimes slower, according to the age, temperature, external, and internal causes—things natural and non-natural—sleep, rest, food, exercise, passions of the mind, and the like.

But, truly, the blood does pass through the lungs and heart in a less quantity; it is conveyed in a far greater abundance into the arteries, and the whole body, than it is possible the juice which we receive by nourishment could supply, unless there were a regress made by its circuit.

This also appears by our sense, when we look upon the dissection of living things, not only in opening the great artery, but (as Galen affirms in man himself,) if any, yea the least artery be wounded, all the mass of blood will be drained out of the whole body, as well out of the veins, as the arteries, in the space of half an hour.

Likewise, butchers can be well able to attest this, when in destroying an ox, they cut the jugular arteries, they then exhaust the whole mass of blood in less than a quarter of an hour, and empty all the vessels. This likewise comes to pass in excising or removing limbs, and tumours, by large profusion of blood, sometimes in a little space.

Nor does it weaken the force of this argument, when some will say, that in slaughtering, or the removing of limbs, the blood flows out as much through the veins as the arteries, seeing the business is far otherwise. For the veins because they flap down, and there is no strength in them to propel the blood, and because their situation is impeded with valves (as shall afterwards appear) shed very little; but the arteries pour out the blood more profusely and impetuously, by impulsion, just as if it were ejected from a spout. But let the experiment be tried, omitting the vein and cutting the jugular artery in a sheep, or a dog, it will be wonderful to see with what a great force the protrusion will take place, and it will be seen how quickly all the blood will be drawn from the whole body, as well from the veins as the arteries.

But it is manifest by what we have said, that the arteries receive blood no where else but from the veins by transmission through the heart, wherefore tying the aorta at the root of the heart, and opening the jugular or any other artery, if you see the arteries empty, and the veins only full, it is not to be wondered at.

Hence you shall plainly see the cause in anatomy why so much blood is found in the veins, and but a little in the arteries; why there is a great deal found in the right ventricle, and but a little in the left (which thing perhaps gave occasion of doubt to the ancients, and of believing that air alone were contained in those cavities, whilst the animal was alive) the cause of which perchance is, because there is no passage afforded from the veins into the arteries, but through the lungs and the heart; but when the lungs have expired and cease to move, the blood is prevented from passing from the little branches of the *vena arteriosa* into the *arteria venosa*, and so into the *left* ventricle of the heart, (as in an embryo it was before observed, that it was stopped by reason of the want of motion of the lungs, which open and shut up the mouths, and also the hidden and invisible porosities,) but seeing the heart does not cease to move at the same time with the lungs, but does continue to pulsate afterwards, and to outlive them, it happens then, that the left ventricles and the arteries do send the blood into the habit of the body, and that it does not receive it through the lungs, and consequently they appear empty.

But this also affords no small credit to our purpose, since there can be no other cause

given for this but what we have alledged as our supposition.

Besides, from hence it is evident, that how much more, or vehemently, the arteries do pulsate, it happens in all hæmorrhages the whole body is sooner emptied.

It likewise happens, that in all faintings, fear, and the like, when the heart pulsates more weakly, languishingly, and with no force, that all hæmorrhages are stopped and prevented.

Furthermore, it is that in a dead body, after the heart hath ceased to beat, you cannot by any means extract above half the mass of blood out of the jugular or crural veins, or from opening arteries; nor can a butcher, when he hath struck the ox on the head and stunned him, draw all the blood from him, unless he cuts his throat before the heart ceases to pulsate.

Finally, and last of all, we may imagine that no man has hitherto said any thing right regarding the anastomosis of veins and arteries, where it is, how it is, and for what cause, in which disquisition I am now searching, and I am about to touch on it.

(To be continued.)

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## MR. ANDERSON ON THE CHOLERA.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

As an old contributor to the *London Medical Repository*, the new series of which you so ably conduct, I enclose you three cases of cholera, if you deem them worthy of insertion in your Journal.

My principal object in laying them before the profession is, to shew that we must not be led away by new names, and new remedies, for diseases that are apparently *only different in degree*, and seem still to be under the control of those remedies we have long been in the habit of using for the milder form.

I agree with you, and many other talented physicians, in believing that Sydenham has described this epidemic, and that it is not new to this country; and I also think, that the alarm is out of proportion with the danger, and, as far as my experience goes, it is not contagious, under ordinary circumstances. I have seen a great number of cases, of common cholera during the last eight years, some of which were very severe, but I have never lost a patient on the stimulating plan I have adopted.

Some years since I detailed the case of a medical gentleman to the Westminster Medical Society, in which there was great collapse, cramps, loss of voice, and other violent symptoms; I used brandy and opium very largely with complete success.

The result of the accompanying cases will,

I think, prove we are not too hastily to desert our old remedies (the most potent stimuli we have) for salt and water, bleeding, or injection into the veins, which may be worthy of trial when the danger is not urgent, but from all I have seen, heard, and read, I cannot rely on them in the stage of complete collapse.

It will be seen that in the case of Edmonds, the attack came on with the usual symptoms of English Cholera, and as he became worse, they assumed the character of *Asiatic* or malignant cholera.

I consider his recovery mainly attributable to my being on the spot early, and not leaving him till I had established reaction. It appears to be the height of folly and inhumanity to think of removing patients to cholera hospitals in the stage of collapse (that is, as far as their own safety is concerned), and I have already expressed my opinion on that subject to our Board of Health, who recommend the practice.

The two other cases presented a malignant character, but even slight in comparison with the former.

I remain, Gentlemen,

Your obedient servant,

WILLIAM M. ANDERSON M.R.C.S.

30, Foley Place, August 1st.

### CASE I.

Mrs. G. aged 30, a lady of spare habit, delicate health, and extremely nervous, residing at Kentish Town, was attacked, on Tuesday the 17th of July, at five o'clock A. M. with violent pain in the epigastrium, accompanied with vomiting, and continued bilious dejections, which lasted until half past seven, when I first saw her, and administered a tumbler of hot brandy and water, with 20 drops of laudanum, which fortunately staid on the stomach, and I ordered the following mixture:

R. *Tinct. card. co.* ℥vj.

— *capsici.*

— *opii. aa.* ℥j.

*Aq. Piment.* ℥v.

*Syr. zinzib.* ℥ij. *M. ft. Mist.*

two or three table spoonsful to be given every hour if necessary. I was sent for about 1 P. M. but being from home, did not arrive until 2 o'clock, when I found she had been attacked with shivering, loss of pulse, cold perspiration, and a general state of extreme collapse, the nails and extremities looking blue, the vomiting and purging incessant, and of that peculiar character described like rice water; her husband, whom I had prepared for any relapse, immediately gave her strong brandy and water, repeating it every 10 minutes till she rallied, which I found had partly succeeded when I arrived. I continued the brandy in arrow root, at longer intervals, applied warm fomentations to the legs and thighs, which were violently cramped, and after some hours



succeeded in producing reaction. I ordered the mixture to be given every two hours.

Eight P. M. I saw her again this evening; found she had had no return of sickness; pulse 80, surface warm, and very slight return of cramps; she complained of head ache.

Repeat the mixture every three hours, and the brandy to be diminished in quantity.

11. A. M. July 18.—Still more improved; no sickness, cramps, or further dejections; pulse strong, and full. I ordered.

R. *Hydr. sub. gr. x.*

*Pulv. opii, gr. j. m. ft. pulv.*

to be given immediately, which produced two or three healthy evacuations, and from this time she gradually recovered.

#### CASE 2.

John Edmonds, ætat. 32, was attacked suddenly about 12 o'clock on the night of the 22nd of July, with violent *bilious* vomiting, that lasted two hours, and was then accompanied with excessive *bilious* dejections, which continued until eight o'clock the following morning. When I first saw the patient, I found him with a countenance of extreme anxiety; tongue white and furred, but not cold; skin cool; pulse about 70, weak and fluttering, vomiting every thing he took, and the evacuations passing almost involuntarily. I ordered a mixture composed of

*Tr. card. co. ℥vj.*

*Tinct. opii. ℥j.*

*Syr. ℥ij.*

*Aquæ piment. ℥v. ft. Mist.*

having first given him a small tumbler of brandy and water, with 20 drops of laudanum. This staid on his stomach, and I desired them to give a dose of the mixture in half an hour, repeating it every hour, if requisite. I did not at this visit consider the case an alarming one, although from the circumstance of his having lived very low, and not had animal food more than once a week, I was afraid of his want of stamina. I was called suddenly to see him about 11 o'clock, by a relative, who stated he was dying, and I certainly found him in a very critical state; the first and second doses of medicine had been rejected, and what he vomited was not bilious as before, but thin like gruel or rice water, and exceedingly offensive (smelling like fish in a state of putrefaction), and the motions were incessant and of the same kind. I could scarcely discover any pulse; he had a cold clammy perspiration; violent cramps in his legs and thighs; his countenance was much more dejected; his tongue and breath cold; his eyes sunk and dark, and his nails and whole surface looking blue; he was in fact very nearly gone. I succeeded, however, in producing warmth and re action by friction, the application of hot bottles to his feet, and by giving him a table spoonful of brandy in

two of hot water, and ten drops of laudanum every ten minutes. I staid with him till I had effected this, and added to the former mixture

*Tinct. kini. ℥ss.*

*Tinct. capsici. ℥j.*

which was to be given every hour. This fortunately staid on his stomach, and the patient took a little arrow root, with brandy in it, with the like success. When I saw him at two o'clock, he had rallied, was warmer, his pulse 80 and full, and he had only a slight return of the cramps in his legs; no motions or sickness; his voice a little more audible, and somewhat less alarmed about himself. Continued his medicine every two hours, and arrow root frequently with brandy. When I saw him at six o'clock, he spoke much better, looked less haggard, and only complained of slight headache. Nine o'clock, still improving, pulse good, no return of sickness or cramps; but as the headache was rather increased, I desired less brandy to be given, and the medicine every three hours.

July 24th, nine o'clock A. M. much better, countenance cheerful, pulse 85, full and soft, and headache gone; he had slept greater part of the night, and was in all respects going on well. Four o'clock P. M. still improving, but appeared a little excited from the quantity of brandy taken. Five A. M. I was called suddenly to the patient, who had a return of sickness and purging, but I succeeded in again rallying him by the same means as before, and ordered

*Hyd. sub. gr. x.*

*Pu. opii. gr. j.*

to be given immediately.

Eleven o'clock A.M. purging abated; ordered him to be more careful in his diet (finding he had taken rice in his beef tea not half boiled), and from this time he gradually recovered.

#### CASE 3.

Mrs. B.'s servant had been suffering some days from diarrhœa and sickness, and on the evening of the 16th July these symptoms increased, and she was attacked with shivering of the whole body, accompanied with great depression, coldness of the extremities, and other symptoms of exhaustion. I was sent for and prescribed a draught, containing

*Tinct. card. c. ℥ij.*

*Tinct. opii. ℥ss.*

*Aq. piment. ℥x.*

*Syr. ℥j.*

which I have found generally stay on the stomach when all other remedies fail; but unfortunately, or rather fortunately as the result proved, her mistress in the alarm and confusion, caused by her fright, gave an ounce of tinct. opii. out of another phial, in mistake for the draught. She immediately discovered her error, and lost no time in informing

me, and being on the spot early, I succeeded in withdrawing it from the stomach without any bad effects; but, on the contrary, my patient had no return of the previous symptoms, as I consider through the sudden effect produced in the first place by the laudanum, and in the second place, by the *emetics* given to reject it from the stomach.

The only remark I shall farther make on these cases is, that I am sure if practitioners will continue to employ their old remedies, notwithstanding the disease has assumed a more malignant and fatal aspect, they will not fail them in producing reaction (accompanied by the external means recommended) if followed up in the manner suggested by John Hunter, viz. every ten or fifteen minutes, till they produce their effect; and unless I have more satisfactory proof of the efficacy of some of the new theories, I shall certainly continue my present practice, which has hitherto been successful.

### Reviews.

*The American Journal of the Medical Sciences, February, 1832.*

THE first Essay in the Number of our valued cotemporary is headed—

*Remarks on the Autumnal Remitting Fever, as it appeared in Dallas county, Alabama, in the months of September and October, 1831.* By J. WIGGINS HEUSTIS, M. D.

THE Doctor precedes his account of the fever very appropriately, by a description of the state of the weather for some time previous. The winter had been very severe, and the spring tardy; parts of June, and August, and the whole of July were unusually dry, which was the more felt in consequence of a plentiful supply of rain that had previously fallen. About the 1st of August, soon after the rising and just before the setting of the sun, "its aspect was singularly striking, being clear and pale, of a bluish green complexion, much like a well-burnished pewter dish. Its beams, even at noon-day, were peculiarly faint and pale; and, as cast upon the floor through a door or window, of a sickly blue and greenish hue. This phenomenon appears to have been

owing to an unusual accumulation of vapour in the atmosphere." It is accounted for in the following manner by a gentleman of the name of Hal- lowell, of Alexandria.—

"To understand the phenomena alluded to, it will be necessary to make a few preliminary observations. During the great total eclipse of the sun that had recently taken place, the moon had just passed its perigee, or that point of its orbit nearest the earth, and consequently the combined action of the sun and moon upon the atmosphere produced a great tide in the equatorial regions, and diminished the pressure of the air upon the whole surface of the earth,\* This diminution of pressure upon the surface of the water would occasion a great increase of evaporation, particularly when united with the high temperature that accompanied it. For it is an established fact, that the amount of evaporation from an insulated surface of water depends upon the elevation of temperature and diminution of pressure. A vast quantity of vapour thus raised was very observable on the evening of the twelfth instant, at a considerable elevation in the western part of the heavens, and continued to reflect a very red light for a long time after the sun had set. The appearance of the heavens on the morning of the thirteenth I did not observe, but about mid-day, the sun shining through this body of vapour had a silvery appearance, similar to that which it wears when shining through a vanishing fog; and I observed it to give an unusually ghastly appearance to the countenances of persons. Between three and four o'clock, the position of the sun with respect to this body of vapour becoming changed, it assumed a greenish-blue appearance, precisely similar to that produced by the following experiment, and which, in my

\* It is evident, that as the air is partially supported by the combined attraction of the sun and moon, its pressure upon the earth must be diminished. The greatest effect would not be at the immediate time of conjunction, but some days after.

opinion, was dependant upon the same cause. Let a screen, upon which the spectrum produced by the separation of the solar beam into its primitive colours by a glass prism is thrown, be perforated so as to let all except the red ray fall upon a double convex lens, and be converged to a focus, the result will be a representation of the sun of a greenish-blue colour, exactly such as it was observed to have at the time alluded to. The colour is that resulting from a combination of all the primitive colours except the red, and is denominated in optics the *opposite colour*. \* \* \* The greenish-blue colour of the sun, then, I think, depended upon the red rays being reflected by the intervening body of vapour, while the other six passed to the eye, and produced the observed appearance. This opinion was strengthened by one or two facts observed at the time. I passed the sun's rays through a prism, and while the yellow, green, blue, indigo, and violet colours appeared with their appropriate brightness, the orange was considerably less distinct, and the red made less than the orange. Another corroborative fact was, that as the sun descended below the body of vapour, which was about fifteen or twenty minutes before its setting, the vapour reflected an intensely red light; the light that passed through it was, therefore, separate from the red, and would have produced the opposite, or greenish-blue appearance. The spot that was observed is by no means an unusual thing upon the sun's disc. It was visible to the unprotected eye, merely in consequence of the diminished brightness of the sun. By aid of a telescope, a considerable number of spots were visible. In the summer of 1816, a spot was visible to the naked eye for eight or ten days in succession."

From the 12th of August to the 3rd of September, however, an unprecedented quantity of rain fell, far beyond the recollection of an individual often quoted, "*the oldest in-*

*habitant*;" so much rain was there, that notwithstanding the heat of the weather, the rapidity of the evaporation, and the vast expenditure of moisture in the support and growth of vegetation, many of the rivers overflowed their banks, doing considerable injury. The consequence of this state of the weather was the autumnal remitting fever, on which Dr. Heustis has written the present essay. Notwithstanding the inundations spoken of, many towns, near the rivers escaped almost or entirely, while others at a distance from water-courses, suffered from disease. "This difference was owing to local peculiarities; for wherever the rain-water formed ponds and became stagnant, or met with a rich and fermenting alluvion, febrile miasmata were rapidly evolved, and diffusing their poison through the ambient atmosphere, became the cause of disease to such as were constantly exposed to them. I say constantly, for a transient exposure to, and continuance in those infected places, was not sufficient to originate the disease. And, indeed, very few persons visiting them, and remaining all night, were subsequently affected with fevers; and but a small proportion of the residents themselves became the subjects of disease."

Dr. Heustis holds the rather peculiar idea, that all who were exposed to it received the miasm through the medium of respiration, but that it required some derangement of the non-naturals, or a peculiar susceptibility of the constitution to bring it into action. So that according to him, a person may carry the miasm, or the effects of the miasm of fever with him for years, should he happen (not a very likely thing though) to live according to the dictates of nature in the meanwhile, and then some derangement or other is to open the flood-gates, and overwhelm him at once; in other words, when infected with this miasm, the fever is too modest to introduce itself, it requires that some other malady should in-

dertake that office.—Some persons have strange notions :—

The following account of the fever itself will be read with interest.

“The fever was mostly of the double tertian character, with paroxysms often protracted, and running into each other without any distinct intermission. In other instances, the single tertian type prevailed, but of greater severity than the ordinary fever and ague. In most cases the sensation of chilliness was slight, and after the first paroxysm almost imperceptible. In some however the disease was ushered in with a severe ague. In the majority of cases the patients complained of great pain in the head and back. The pulse was rarely full and strong, often hard and frequent, and in many cases small, weak and easily compressible; and in persons advanced in life, intermitting, more especially under the operation of evacuates. The pain of the head was confined more especially to the forehead, where it was often distressing; becoming more aggravated during the exacerbation of the fever. But notwithstanding the severity of the pains in the head and back, the cases in general did not admit of the free and liberal extraction of blood.

“The fever this season was of the congestive character, with a great disposition to an unequal distribution of febrile action and development. In many cases, the head and particularly the extremities, would be cold, while the trunk was hot; whilst at the same time there was considerable palpitation of heart, with a pulse small, weak, and frequent. In such cases I have known dangerous, and even fatal mistakes committed. This weakness of pulse and coldness of the extremities having been looked upon as circumstances of febrile remission, quinine has been exhibited and persevered in; but so far from putting a stop to the progress, or mitigating the disease, the symptoms have become more and more aggravated; the breathing short, anxious, and laborious, and interrupted with frequent sighing; the

pulse, instead of becoming stronger, was rendered still more weak and frequent; the sighing and restlessness more urgent; and life was finally extinguished from over stimulation.

Sickness, restlessness, and feelings of great distress were often the only, or the principal symptoms by which an accession or recurrence of fever could be ascertained. In other cases a weak and hurried pulse would be accompanied with an evolution of general increased temperature, with heat and dryness in the palms of the hands and soles of the feet, and an aggravation of pain in the head and back.

“Sometimes after a transient state of febrile excitation, collapse took place at an early stage of the disease, with little impairment of the general powers of the system; this was more especially the case where depletion had been too freely practised. It is necessary to make a distinction between this state of prostration and that which takes place at a more advanced period. The first is generally remediable, the second is not; in the former the prostration and collapse are for the most part confined to the vascular system, while such is the strength of the muscles of locomotion, that the patient is able to rise and set up, and even to walk about. This disparity of strength and power between the two sets of organs also sometimes exists in the collapse which takes place towards the termination of the higher grades of bilious fever; and the more malignant the disease, the sooner is this state liable to ensue. This appears to admit of an easy explanation, on the presumption that as the fluids of the body are primarily contaminated, the strength and vitality of the heart and blood vessels are sooner overpowered and subdued by the deadly poison that has been received into them.

“It generally happens that our autumnal fever ceases as an epidemic about the 10th of October; yet the sporadic cases that occur subsequent to that time are of a more obstinate and malignant character.

“Early in the season the discharges from the bowels were mostly of a light clay-coloured complexion, with very little black, green, or bilious discoloration so generally remarkable in our autumnal endemics. In the few sporadic cases that occurred after the commencement of cool weather, the stools were highly coloured, of a dark green, olive, and almost black; becoming in the progress of the complaint, of a lighter hue, between an olive and a brown, and of a gelatinous, sleek, and oily appearance; but in no case peculiarly offensive. In one patient the stools were thin, of a watery, and sanguinolent, purplish hue, proceeding probably from a rupture of some small blood vessels of the rectum or colon, occasioned by overaction and morbid stimulation of the bowels, an appearance I have several times observed. It is not, however, generally a dangerous prognostic, and may be removed by anodyne injections.”

In regard to the treatment, the Doctor states that he was very seldom called in, in the early stage of the complaint. Emetics or cathartics had been previously employed, perhaps even both, and sometimes to too great an extent, so that in addition to the fever, the physician had to cope with irritation of the *primæ viæ* and watery discharges by vomiting and stool. He utters a strong protest against the use of tartar emetic, and adds, “the time, however, I trust and believe, is not far distant, when this poisonous and dangerous article, as an emetic, will be discarded from among the medicines employed in the treatment of the autumnal fevers of our climate.” He employs it only in small doses as a diaphoretic, and as such he considers it to be valuable.

“Notwithstanding the severity of the pains in the head and back, the cases in general did not admit of the free and liberal extraction of blood, or it was seldom that the physician saw the patient at a proper season to avail himself of its employment; and for the most part, the loss of four or five

ounces was sufficient to produce a reduction and softening of the pulse. If the febrile action was considerable, with much head-ache, as there generally was, and a hot skin, bleeding was highly useful. But the quantity required at any one operation was small, seldom exceeding eight or ten ounces; if the extraction went much beyond this, there was danger of sinking and alarming prostration. In this there was a peculiarity, different from what existed in fevers of former years, when I have known the pulse to remain firm after the loss of twenty or thirty ounces of blood. In one instance, the too frequent operation of bleeding had nearly proved fatal. This took place at the commencement of the sickly season, before the character of the epidemic was well understood. The case was that of a young, stout, athletic negro man, full of life and blood, but in whom the arterial action was not in proportion to the habit of body, and the other symptoms of the fever. The pulse instead of being full and strong, or hard, vibrating and elastic, was, on the contrary, rather small and contracted, indicating a congestive state of fever. I opened a vein, though on the third day of the disease, and without much alteration of symptoms, permitted the blood to flow until nearly twenty ounces had been extracted. Finding that no disposition to syncope or perspiration was produced, and that the trunk still continued preternaturally warm, I gave him the cold bath, seating him on a chair, and affusing with a small pitcher, about four gallons of cold well water on the naked body. He was now cool, and being conveyed to bed, expressed himself much relieved. I now gave him about twenty grains of calomel, with directions to exhibit a dose of castor oil, should not the calomel operate in the course of three or four hours; I then left him to visit other patients: returning in about three hours, I was startled to find him labouring under a state of extreme arterial prostration. His system had not reacted from the effects of the

cold bath; and the castor oil, which had been exhibited too soon, together with the calomel, had already produced profuse and repeated dejections from the bowels. The extremities were cold, the countenance inanimate, the voice and consciousness nearly extinct, and the pulse thread-like, evanescent, and only perceptible to the most accurate and delicate touch. Without delay I applied blistering plasters to the extremities, made frictions with hot brandy, gave him an anodyne to check the operation on the bowels, and stimulated him with quinine, exhibited every hour; sinapisms and poke root poultices were subsequently applied to the soles of the feet and to the palms of the hands. This case remained critical and doubtful for several days; reaction however ultimately took place, with an accession of fever, which was combated by febrifuges and aperients, and the man recovered. The error in this case consisted in making too full and liberal extraction of blood, without as yet being sufficiently acquainted with the character of the epidemic; the paying too little attention to the state of the pulse, which though the patient was of a strong athletic habit, did not possess sufficient development and force to authorize the free use of the lancet. Yet, here again I was imposed upon; for, as the patient was bled sitting up, and as no disposition to syncope took place, with but little change of the pulse or other symptoms, the extraction was considered within the bounds of prudence. A second error was, in making too free use of the cold bath; and the third in following up these two Herculean remedies, by exhibiting a twenty grain dose of calomel; the latter, however, might not have been injurious, had it not, contrary to my directions, been succeeded too soon by a large dose of castor oil."

When the physician is of opinion that blood should be drawn, *he should see it done*, as, although the symptoms may indicate the necessity of abstracting a large quantity, the patient perhaps cannot safely bear the loss of half the quantity prescribed;

the physician should therefore be at hand, and, while the blood is flowing, the finger from time to time should be applied to the artery, to ascertain when a change takes place in the pulse. The feelings of the patient, the countenance, and the state of the skin, should also be watched with great circumspection. Small bleedings from the foot, repeated when indicated, were very useful. In general, the bowels were readily acted on, indeed, in many cases, it was necessary to arrest their undue action; some persons seem to have died from hypercatharsis. Enemata were preferred. Dr. Heustis makes the following remarks on the use of cold affusion:—

"Whenever the temperature was high and generally diffused, I found, as in former years, the best effect from the cold bath given by affusion. In distressing and protracted prolypsms, which had perhaps continued thirty-six or forty-eight hours, on arriving and finding a general heat and dryness of the whole surface, pain in the head, and pulse tense and frequent, I have without delay, directed the affusion of four or five gallons of cold water on the naked body, wiping and conveying the patient to bed; I have then sometimes given, with signal benefit, an anodyne sudorific mixture, composed of a teaspoonful or two of spirit of nitre, the same quantity of paregoric, of twice the ordinary strength of the Dispensatories, and fifteen or twenty drops of antimonial wine. A warm fluid perspiration, by the use of these means, soon breaks out, which being rather encouraged by drinking freely of cream of tartar and water, or lemonade, with from ten to fifteen drops of antimonial wine every two hours, leaves the system cool and free from fever, and in a proper situation for taking quinine. When the arterial action is strong and hard, I premise the use of the cold bath by the extraction of a few ounces of blood. When this circumstance has not been attended to, I have known the cold bath administered and repeated with

nothing more than temporary relief; the fever in a few minutes developing itself with as great intensity as before. This is more apt to be the case in persons of strong constitutions and sanguine habits, from northern and healthy climates. If after the first exhibition of the cold bath, it is found that the heat and increased arterial action soon return, it will be better to have recourse to venesection, previously to a repetition of the bath, which may then be given, should the bleeding not have had the effect of superseding its necessity, with every probability of success.

“When the increased temperature was only partial, as was frequently the case, being confined to the head and trunk, whilst the extremities were colder than natural, the general cold bath was not admissible: at least I have never employed it under these circumstances. In such cases cloths wet with cold water were beneficially applied to the head, chest, and abdomen; for this purpose I made use of large towels, or two or three of them together, and folded several times, so as to prevent their becoming too soon heated. These were renewed every fifteen or twenty minutes, or as often as they became warm, until the heat became permanently reduced to the natural standard, or a perspiration made its appearance. This plan is also advisable in those cases where the general cold bath might be objectionable on account of the existing debility of the patient. When there was an undue accumulation of heat in the extremities, as was not unfrequently the case, great relief and benefit were derived from sponging or wetting them with cold diluted vinegar, or what was preferable, lime juice and water.”

In regard to the use of quinine, in well marked intermittent fevers, there could not be a doubt of its utility; but the bilious remittent required circumspection. “It seldom happens, however, that a remission more or less considerable does not take place, at least once in the

twenty-four hours; this is known by the reduced hardness and frequency of the pulse, the cessation of headache, and the distressing thirst and dryness of the mouth, by a state of comparative ease and composure, and perhaps by the appearance of a perspiration. This, then, is the critical and important period for exhibiting quinine. A perfect apyrexia is not to be expected; but if, as often happens, the quinine produces a perspiration, which it does more effectually if aided by the exhibition of spirit of nitre and antimonial wine, with an infusion of serpentaria or sassafras; if in this manner general perspiration is produced and kept up, we may be satisfied that the exhibition is safe and proper. When the remission is short, lasting no longer perhaps than one or two hours, it becomes necessary to push the remedy with a bold and vigorous hand.

“If after one or two exhibitions of this medicine, it should be found that the febrile symptoms become aggravated, without the appearance of perspiration, we must desist from its employment for the present, and watch for a more favourable opportunity.”

In regard to the use of opium, Dr. Heustis says, “it is often desirable to procure ease and composure, and a respite from the harassing restlessness and vigils of disease. For this purpose I often prescribe at bed-time, provided the fever should not be very considerable, a teaspoonful of paregoric, and the same quantity of spirit of nitre, with fifteen or twenty drops of antimonial wine, to be repeated, if necessary. So far from stimulating the arterial system, and aggravating the fever, I have found this prescription one of the most effectual remedies in subduing the remains of the febrile restlessness and excitement, which it appears to accomplish by its anodyne power, and by promoting perspiration, which latter property it possesses in a more eminent degree than any other medicine, or combina-

tion of medicines, that I have ever employed."

Whenever irritability of the stomach, which was not very common, occurred, blistering the epigastrium was of great service; abstinence from all kinds of ingesta, solid and liquid, was absolutely necessary, and when this was neglected, the irritability and vomiting became very obstinate.

Dr. Heustis concludes with the following remarks: — "In desperate cases, it will often be necessary for the physician, in some degree at least, to become also the officiating nurse and constant attendant, as no other person is competent to adjust the treatment to the various changing symptoms and necessities of the disease. In critical circumstances, where life and death stand almost on an equal balance, a slight error is sufficient to turn the scale, to the inevitable destruction of the patient." We have been highly pleased with the perusal of this paper, the substance of which we have just placed before our readers. It is followed by another, entitled, "*Account of the Scarlatina which prevailed in Deerfield, Massachusetts, in the years 1830 and 1831.*" By STEPHEN W. WILLIAMS, M.D. late Professor of Medical Jurisprudence in the Berkshire Medical Institution.

This essay describes an epidemic scarlatina, which, in the commencement, was inflammatory, but afterwards became typhoid. The temperature was exceedingly variable, the thermometer being at the commencement of the year 1831, 55° above zero, and by the middle of the month 17° below it. The paper contains nothing new, and consequently we shall dismiss it without further notice, merely observing, that the Doctor makes honourable mention of the belladonna as a preventive, but does not say whether he found it of use, nor even whether he gave it a trial, although he recommends others to do so.

Next follows a case of spinal disease, by Professor Sewall, of the Columbian College, which is in no-

wise remarkable, save from the temporary relief gained from the use of the spine-cart, and the communication of the abscess with the large intestines. "The immediate and complete relief from pain and other unfavourable symptoms by the suspension of a spine cart, while a recumbent posture did not abate one morbid symptom, shews that the state of entire rest and horizontal position, so strongly insisted on by the highest medical authority, is not entitled to unqualified approbation, and that these two apparently opposite modes of cure demand a fuller experimental investigation." The little patient, a child about two years old, was, in October, 1830, placed under the care of Dr. Mitchell, at which time he had issues open, but, "from a belief that issues are often injurious in exciting and keeping up hectic irritation, an opinion, says Dr. Mitchell, derived from long observation, they were closed as soon as possible." The child was put afterwards under the care of Professor Sewall, by whose directions the spine cart was used, from three to five hours daily, for several weeks, when the little patient got cold, all the unfavourable symptoms came on again, and the use of the cart was given up. He lingered till the 12th July, 1831, when he expired in a state of extreme emaciation. During the greater part of his illness, he passed more or less purulent matter from the bowels. The autopsy shewed a communication between the diseased vertebræ and the arch of the colon, where it crosses the spine. The greater part of the bodies of the two superior lumbar vertebræ with the intervening cartilage was destroyed.

The appearance of the spine is shewn by a plate, containing two figures, one giving the spine, as straightened to its natural condition, the other as curved, in sustaining the superincumbent weight of the body.

(To be continued.)



*A Practical Medico-Historical Account of the Western Coast of Africa, embracing a Topographical Description of its Shores, Rivers, and Settlements, with their Seasons and comparative Healthiness; together with the Causes, Symptoms, and Treatment, of the Fevers of Western Africa, and a similar Account respecting the other Diseases which prevail there.* By JAMES BOYLE, M. C. S. L. Colonial Surgeon to Sierra Leone, Surgeon, R. N. &c. Highley, London. 1831. pp. 423.

WE have many apologies to offer the author of this work for our delay in completing our review of it, which is solely owing to the work having been mislaid. We will now hasten to fulfil the promises which we made in the former notice of Mr. Boyle's work, by an ample examination of its contents.

Hitherto the fevers which appal the intended settler on the African Coast, and, at certain periods of the year, cause dreadful ravage among the Europeans, have not found an historian; they have been classed with the remittent, yellow, and other fevers, but their peculiarities have not been pointed out, unless in essays which are inaccessible to the majority of the profession. To know the nature of any disease, is half the battle, and how far Mr. Boyle will be able to supply us with this knowledge, we shall speedily be enabled to ascertain.

“Nor is it only in the immediate sacrifice of life, fearful and appalling as it is, that this deficiency in our medical annals has operated prejudicially to the accomplishment of the religious, moral, and beneficent designs of our country. The terrors of the climate have been displayed, oftentimes too truly, but sometimes with exaggeration, and no adequate corresponding effort has been made to counteract their influence. The bane has been set forth in all its desolating power; but the antidote, as far as the public, and even the medical world in general are concerned, has

been left in utter obscurity. The consequence has been, that men of acquirement and ability, in whatever calling, have been generally intimidated, by the character of the climate, from attempting to serve in it, and even a considerable portion of the few who have struggled strenuously to brave the danger, have been hastened to the grave by the working of forebodings of an impending dissolution, stamped upon their mind previous to their quitting England.

“These are important considerations, but there are yet others which deserve attention. There is an actual connexion between England and Western Africa; one from which this country cannot retire without great and various losses; and thousands of our fellow-countrymen, and a considerable mass of property, are necessarily employed in its maintenance.

“With the coast in general an extensive trade in gold-dust, ivory, palm-oil, wax, and hides, is carried on: we have several settlements there, in some of which an important trade in timber is prosecuted. In these settlements a large military force was stationed during the late war, and even subsequently; and it is impossible to say that a necessity for its re-organization or the establishment of similar protection may not arise. Besides, for many years past, the Western Coast of Africa has been the cruising ground of a British naval squadron for the suppression of the illicit traffic in human beings; and Freetown, Sierra Leone, is the spot selected by the Conventional Powers for the seat of the Mixed Courts, constituted for the adjudication of vessels charged with the crime of slaving.”

It has been said again and again, that the medical officers either do not live or remain long enough on the coast to be enabled to judge accurately of its fatal disorders; but this Mr. Boyle denies: and even were it so, the combined experience of those who have resided there, as evinced in their reports, should be made known for the benefit of others, and

thus such a foundation might be laid, as to render the labour of future observers in raising the superstructure comparatively null. We here take the opportunity of urging on the gentlemen at the head of the Army and Navy medical Boards, the evident necessity, the utility of publishing, not the whole, but selections from the numerous, and frequently very valuable, reports which are constantly transmitted to them. If they are unwilling to put the country to the expense of publishing them in the form of books, the editors of the various medical periodicals would willingly devote part of their pages to the diffusion of such practical knowledge as is contained in many of the reports alluded to.

To return to the work before us; Mr. Boyle has, apparently, every qualification for the task he has undertaken; he appears to be a zealous and industrious observer, and one who has paid peculiar attention to the subject under notice. He has filled the situations of colonial surgeon, and surgeon to a king's ship; the latter in the year 1822 and 1825, and the former in 1827, 1828, 1829, 1830, and the commencement of 1831. Hence it will appear, that he has *enjoyed* (Qy. suffered) greater opportunities of investigating the nature of its diseases than almost any other surgeon who has visited the coast; and it should be remembered, that in the clime of Western Africa time is rarely given for "much deliberation, long choosing, and beginning late." It appears too that Mr. Boyle, although probably he may boast of a longer immunity from the disastrous effects of an African climate, has not escaped entirely scot-free, for he remarks, that "since he has returned to England his health has been so precarious, and he has suffered so much from attacks of intermittent fever, an acquaintance made in Sierra Leone, that he has found even the labour of compilation harassing.

"Still he has toiled to the end;

and he now launches his bark upon the sea of popular remark, sincerely conscious of having endeavoured to do well; himself again on the eve of departing for that clime he has striven to delineate, he is alive to all the anxious fears and doubts of those whose friends are sojourners there; and it will ever be to him a source of the proudest gratification to reflect, that he spent the few months which might have been devoted to ease and pleasure, in an humble, but trying effort to lessen the appalling dangers and the distressing fears hitherto associated with the bare mention of Western Africa." p. xvi.

Mr. Boyle commences the topography of the coast with a description of the river Gambia or Gambia, which is navigable during a certain season of the year by vessels of 150 tons burden, for 250 miles, its whole course being computed at 500. It has several mouths, formed by shoals and sand-banks. From Macarthy's Island, about 250 miles from the sea, the channel of the river is studded with islands, apparently beautifully wooded, sand-banks, and shoals. From December to June, or during the dry season, the river is safely navigable, the tides being regular; during the remainder of the year, or the wet season, in consequence of the swell caused by the rains, it cannot be passed. The banks of this river near its mouth are low, in some places sandy and sterile, although for the most part marshy and of black mud, thickly wooded. The stream is muddy, and the borders swampy, being, from low water-mark, covered with mangroves, aquatic shrubs, and thick reeds. The adjacent country is so wooded, that it may be called almost an impenetrable bush; it is very marshy; vegetation is extremely rapid; and these circumstances, together with the climate and rains, render the Gambia and its neighbourhood very unhealthy. Remittent fever and dysentery are very prevalent at certain seasons among the Europeans and the natives, especially

those who come from a distance; the natives are more liable to dysentery in consequence of the difference in diet. These diseases are generally most severe at the commencement, and the end of the rains; fresh fever-cases seldom occur when the rains are at the full, or during the dry season.

Bathurst, situate on the isle of St. Mary, is the most northern British settlement on the western coast of Africa; it commands the navigation of the river Gambia, but is a most unhealthy spot. One-third of the island is barren sand, and the rest tenacious black mud, overgrown with mangrove bushes, and those plants which thrive best in a wet soil. The houses, built of stone, are well-finished and convenient; and the inhabitants can obtain good water at the depth of three feet. During the heavy rains, between July and September, it is not rare to see the streets flooded two feet deep. St. Mary's is low, and when the river is swelled by the rains, is overflowed so as to render the houses uninhabitable, were it not for the precautions taken; when the river subsides, an immense quantity of vegeto-animal matter is left behind, which, under the rays of an almost vertical sun, fills the air with noxious effluvia. The wet season is immediately preceded by tornadoes or thunder-storms. The colony during the dry part of the year is healthy, the only affections being the sequela of previous illness; or if fever should occur, it is generally mild, and seldom fatal.

The settlements of the Portuguese on the San Domingo, or Chachio river, are very marshy and unhealthy. Low land, swamps overgrown with bush, mangroves, &c. patches of sand, and occasional acclivities covered with rank vegetation, are almost the only features of the coast, the climate resembling that of the Gambia. Rio Grande is an immense river, with a rapid tide, and is said to be navigable for 150 leagues from its mouth. It has been occasionally searched by the

boats of British men of war for the prevention of the slave trade, a service that may be performed with safety during the dry season. In an island at the mouth of the Rio Grande, Capt. Beaver attempted to form a settlement; the unfortunate result is well known. Bulam island is swampy and covered with bush; it has certainly a beautiful appearance to the eye, but under these fascinating allurements lie lurking the causes of the most violent remittent fever. A further description of the coast would be needless, as it resembles, in a great measure, the parts already spoken of; more inland, the country becomes elevated, and even mountainous.

The Isles de Los, are six in number, viz. Tamara, Factory, Rooma, Whites, Coral, and Kidd. The three last are insignificant, but Tamara, Factory, and Rooma, form an extensive and commodious bay, commanding the mouths of several great rivers, and are worthy of consideration. Rooma is low, with but little jungle, and no wood but the pullom, and upon the whole island there is only one patch of ground capable of being converted into a farm. The water is good, and there appears to be a sufficiency of animals. Tamara is more extensive, and very fertile, in many parts clear, and fit for cultivation; its soil is a dark rich loam, with a sandy intermixture towards the base, and of small pebbles in the upper parts. It contains seven native villages, and one, Charlestown or Free-town, for pensioned soldiers—the latter a very pretty place, with plantations of rice, cassava, and yam. The soil of Factory is similar to that of Tamara, but better cultivated. There are three native towns. There is not a swamp on any of these islands; the temperature is lower and more equable than on the main, and the rains lighter, and of shorter duration.—Tumbo point on the coast, but divided from it at high water, is somewhat similar, and might be made equally available with the islands just described. From this point to the Sierra

Leone river, the coast is low, woody, marshy, intersected by various rivers, and considered to be extremely unhealthy.

The description of the Gambia will apply to that of Sierra Leone in a great measure.

"The northern or left bank of the Sierra Leone, or, as it is more commonly called, the Bullom shore, is low and swampy; and the creeks which intersect it form numerous marshes, the bottoms of which are mud, teeming with animal life. The appearance of this shore is extremely beautiful; and, in the height of the dry season, the country is tolerably free from malaria, but immediately, and for some time after the rains, the very air is pregnant with putrid exhalations, excited by the heat of the sun from this extensive tract of swamp and marsh."

The right bank is somewhat similar, but the creeks are less frequent, and the banks hardly so low.

If the traveller makes Sierra Leone on a fine clear day, it appears to him as a Paradise, but if he arrive when the atmosphere is dense, oppressive, and fraught with deleterious exhalations, the rains deluging the country, and the river swollen, there is then nothing to excite a pleasing anticipation, but every thing to cause apprehension and dread. Freetown is situated on a very gradual acclivity, and consists of intersecting streets of good dimensions. Mr. Boyle states, that the military hospital is of good dimensions and construction; but a friend who served at Sierra Leone a few years back, informs us, that if such be the case, a new one must have been erected lately. The town is apparently a pretty one, but the gentleman already alluded to, says it is very badly situated.

There are many villages built around this place, of which, those in the sea district are decidedly the healthiest, being protected from the malaria of the Bullom shore, by the intervention of the mountains.

The habits of the Europeans who

have settled at Freetown, are generally loose, careless, and dissipated; we know that the troops at Cape Coast Castle are allowed a quantity of rum every day as their ordinary drink by government, which would be sufficient to destroy ten Englishmen even in their own country, and to which quantity the company add an extra glass! Drinking rum African fashion, is a common phrase among those few who have returned from that coast, by which they mean drinking out of the bottle. Mr. Boyle observes, that there is still abundance of room for amendment, and of that there cannot be a doubt. The other inhabitants are Maroons, settlers, or Nova Scotians, exiles from Barbadoes, discharged soldiers from the West India regiments, Mandingos, liberated Africans, and Kroomen. The Maroons, who are Africans by descent, and many of them by birth, seldom suffer from the climate, although they are also subject to continued and remittent fevers; the Nova Scotians, although at first severely affected by the climate, seem now to be accustomed to it so much, that they may be said to be acclimated; the exiles from Barbadoes are very few in number, and the Mandingos are not fixed residents in Freetown, but rather traders from a neighbouring country. The discharged soldiers and liberated Africans may be looked upon in regard to health, in the same manner as the Maroons and settlers. The Kroomen are labourers from a country 150 miles to the southward and eastward, and are perhaps the healthiest class in the settlement. The soil near Freetown is very inferior, yet it appears that there is a very good supply of the staple commodities of life, both animal and vegetable; water too is abundant, and very good.

In regard to the climate, it is decidedly unfavourable to the human constitution in general, and especially to the European. "Where the coast is particularly low, marshy, and embayed, as about the mouths of the

Mellacoree and Scarcies rivers, malaria and all its consequences are more active than at points running boldly into the ocean, and on which a pure sea breeze may be enjoyed, as Cape Roxo, and parts of the Isles des Los." \* \* \* "As a general position, it should be remembered, that the seasons occur at an earlier period in the south than they do in the north." From September to the end of October, the weather is variable; it then becomes settled until the end of January, when shifting winds, with dull, oppressive, cloudy weather, and occasional rains, mists, and terrific storms, are experienced until May, when the rains set in, and prevail to September. The dry season is generally ushered in with two or three tornadoes, which clear the atmosphere, and invigorate the constitution. Mr. Boyle's description of the tornado is extremely vivid, but still incomplete. About Christmas the harmatans set in, and continue from six to ten weeks. These winds are generally from the east; they impregnate the air with a quantity of fine sand, which they take up on the Bullom shore, and, consequently, are very annoying. These winds have a peculiar drying influence, and induce in the native or the seasoned European, coughs, colds, and a species of irregular intermittent. The cessation of the harmatans is generally accompanied by tornadoes, which announce the approach of the rains. These may be said to commence in April, to vary greatly in frequency and power until the latter end of June, in July to assume their greatest strength, to continue at it during August, and to subside in September. During July and August, twenty-four hours of uninterrupted fair weather is rarely experienced; and, on the other hand, it is uncommon for the rain to fall for a longer period than forty-eight hours without any intermission. At the commencement, and for some time after the setting in of the rainy season, the wind blows ordinarily from northward and eastward, and it is then

that fever is most frequent and fatal. As the wet season advances and the rains attain their height, the wind gradually veers round to the southward, and for the time being there is an end to fever.

Mr. Boyle recommends the following measures to be adopted, which he considers would lessen the fatality of the fevers. "They would consist chiefly in the manner of constructing the houses, the planting of trees of rapid growth (paupas are of this description) immediately behind the habitations of the people, facing the interior, local draining, burning the bush in every direction, at proper seasons, and the building and burning of a range of clay kilns at a little distance (in the rear) from the range of houses on the beach. These kilns might be so constructed as to be made to burn many days, even under light rains, and would, therefore, be highly appropriate at the commencement of the wet season, whilst their ashes would at all times contribute to afford richness, dryness, and productiveness to the soil." Of so much importance does Mr. Boyle consider the burning of the bush, that he alludes to it in various places. "It may be confidently asserted, however, that the fevers from the Sierra Leone River and its branches, altogether are much less fatal, in respect to number, than they were a few years back; a circumstance which must depend upon the late great increase of factories, the burning of bush, the clearing and draining of ground, and the consequent reduction of malaria." "There is nothing more conducive to health on the Western Coast of Africa than the land being thoroughly cleared of the bush." The Banana Islands, two in number, are distant about nine leagues from Freetown, due south of Cape Sierra Leone, are well situated, and there do not appear to be any grounds for dreading malarious influence: the soil is a deep, rich, dark loam, with occasional patches of red clay. They appear on the whole admirably adapted for settling, and will

doubtless prove an excellent substitute for Sierra Leone, should it be deemed necessary to evacuate that colony.

This concludes the medical topography of that part of the coast, and with it we terminate the present division of the analysis, to which we intend submitting this valuable work. The immense importance of a thorough acquaintance with the topography of the Western Coast of Africa, has induced us to devote so large a space to its consideration.

(To be continued.)

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THE

London Medical & Surgical Journal.

Saturday, Aug. 11, 1832.

CHOLERA.

THE malignant cholera has assumed a milder character, and has nearly disappeared in London. We are grieved to notice the false and exaggerated reports from the Cold-Bath Fields Prison, and deeply regret that respectable members of the profession should be guilty of such conduct. We have frequently stated that fictitious cases of cholera were reported by unprincipled alarmists, and we are firmly convinced there is at present no correct and accurate record of the number of persons who have laboured under the disease. The public press has just grounds to censure the profession; though it ought to be remembered that the most eminent of the faculty have not been cholera hunters or alarmists.

We were highly amused on perusing the document of the fruit venders, published by the Central Board of

Health. These disinterested persons assure the Board, that only one man in 1010 occupied in collecting fruit has been seized with cholera; and upon this important fact, the learned and able conservators of the public health in White Hall Place, proclaim to the world that a moderate use of fruit is not injurious to health, and is not an exciting cause of cholera. The opposite opinion has prevailed since the time of Sydenham, and is that of the faculty in general, as repeated observation and experience has attested its validity. The profession in general caution their patients against the use of fruits and vegetables; the advice is followed, but as it injures the sale of these articles, and as the Board of Health consists of the wisest medical men in the world, they oppose the general and correct opinion, and command the aid of the cholera-medical journals—the stupid parasitical *Gazette*, and the once independent and uncompromising *Lancet*. It was really ludicrous to see the importance attached by such a critic as Mr. Wakley, to the document under notice in the *Ballot*. Had it been the production of the College of Physicians, it could not have been noticed with greater gravity. Now, it appears to us that the exemption of gardeners or other agricultural labourers from cholera, is to be ascribed to their mode of life, exercise in pure air, and rude health. Such persons are not so much predisposed as the inhabitants of crowded cities, or of filthy lanes and alleys, where the air is impure, and the constitution impaired

by hard labour or dissipation. The former may take vegetables or other aliment with impunity; the latter cannot do so without inducing disorder in the stomach and bowels. Such being the fact, we agree with the majority of medical practitioners, and dissent from the opinion of the market gardeners and their patrons, the Central Board of Health.

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TRIAL OF MR. HEATH FOR  
MANSLAUGHTER.

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OF this case we have already, in several papers, given a full and impartial account; the greater part of the medical evidence was detailed in the last Number, so that we need not go over that ground again. We then stated as our perfect conviction, that a jury of honest men could not find Mr. Heath guilty, and the result has proved the justice of our opinion. The case came on on Tuesday at Lewes, before Lord Tenterden, who, in his previous address to the grand jury, had stated that the death of the captain was more attributable to misfortune and accident than to crime, and, as we have already said, the jury were also of the same opinion.

Mr. Heath stated in his defence, that the unfortunate event had arisen entirely from accident. At the time Captain Burdett's prescription was brought into the shop, another person came in and requested ten drachms of oil of tar. He put it into a phial, and placed it, unlabelled, on the counter, in a stand used for

holding medicine made up. After he had prepared Captain Burdett's prescription, he placed the phial on the same stand, and both the liquids being of the same colour, he had, by accident, substituted the one phial for the other, and that containing the oil of tar was unfortunately sent to Captain Burdett.

HIS LORDSHIP, in summing up, observed to the jury, that there was no doubt that this lamentable event had been caused by mistake; but, at the same time, if they were of opinion that the death of Captain Burdett was occasioned by the oil of tar, they must consider whether or not the accused had used due and proper care in sending out the medicine. If they considered that he had, they would acquit him; if, on the contrary, they thought he had not, they must then find him guilty of manslaughter.

After a short time the jury decided the former, and immediately pronounced a verdict of—*acquittal*.

Mr. Heath was, of course, instantly discharged.

The court was crowded during the time of the trial, which appeared to excite great interest.

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CHOLERA AT QUEBEC.

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*June the 23rd.*—This terrific disease, which has been very violent, is now abating; great alarm at one time prevailed, which was not altogether ill-founded, inasmuch as in twelve days the deaths exceeded 2000, being one in twenty of the popula-

tion, including sailors and strangers; the mortality consequently has been much greater than in Europe.

The cholera has reached the Swanriver settlement, and there have been six or seven fatal cases, according to the last report.

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THE  
SPIRIT OF MEDICAL LITERATURE.

No. 4.

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*Dr. Spurzheim.*

SIR A. COOPER declared, in his lectures at the Royal College of Surgeons, that he knew nothing of the brain before he read Dr. S.'s book; and both Dr. Barclay and Mr. Abernethy have requested Dr. S. to demonstrate the brain in their theatres.  
*Annals of Medicine.*

*Cinchona, as an Antiseptic.*

The Edinburgh school gave reputation to Peruvian bark, under the title of the *anti-gangrenous medicine*. This novelty was received by a number of writers, and the prejudice still exists; every one flies to cinchona, and applies it externally, when gangrene appears. The error would be innocent, and even excusable, if it did not exclude more efficacious means; it is now demonstrated that the external use of this medicine is nugatory. The internal use of both it and mineral acids is solely calculated to combat the effects of the absorption of the miasms from the gangrenous part, by strengthening every organ.—DELPECH.

*Fractures of the Neck of the Thigh-Bone.*

M. Delpech states, that he has deposited in the hands of M. Peridier, notary at Montpellier, a bond, in virtue of which 2,000 francs will be

paid to the person who shall transmit two thigh-bones belonging to the same individual, one of which has been cured of a fracture of the neck, without the least deformity.—*Précis élémentaire des Maladies réputées Chirurgicales.*

*Vinous and Alcoholic Liquids.*

Vinous and spirituous liquors introduced into the stomach of a living animal, have a direct tendency to stimulate the fibre, and increase its cohesion. When these liquors are diluted to a certain degree, the increase of activity and of tone which they impart are such as can be sustained without injury. But when ardent spirit is given in considerable quantity to a young animal, it violently inflames the fibres of the stomach; and it would appear that the spirit does not possess the power of communicating an increase of cohesion to a part which is highly inflamed.—DR. ADAIR CRAWFORD.

*The human Mind.*

Many, with the purest motives, have conceived they possess the plastic power to model the human mind according to the design of their own fancy. But there is a greater difficulty than they are aware of. A being thus severely trained might, in some instances escape the impending evil, (hereditary madness.) How far such regimen might contribute to his mental happiness, I will not venture to determine. He would be rendered coldly rational, and tamely benevolent; and his actions would be regulated by solemn propriety. His friendship bounded by cautious calculation, and his affection measured. Such a man would never be amiable, nor would the world delight him. Some experience on this subject, which is yet nascent, has, however, informed me, that an early and persevering attention to the child, may superinduce an ameliorated condition, both of the physical constitution, and moral character.—HASLAM.



*Malignant Ulcers of the Lip.*

If by the straps, or what are called the dry suture, we could keep the lip perfectly still, and prevent it from moving, in the act of speaking, laughing, swallowing, &c. we should infallibly cure malignant ulcers of the lip without excision. This I put in practice with success twelve years ago, and have since uniformly recommended it.—SIR CHARLES BELL.

*Muscles of the Ureters and Prostate.*

In many cases the enlarged portion of the prostate, which projects into the bladder, is not the third lobe, but a more anterior part of the gland. It appears that where there is a valvular projection into the bladder, the muscles of the ureters are found to be inserted into the root of the tumour. Wherever there is this valvular projection from the prostate, the muscles of the ureters are found enlarged.

SHAW.

*Examination of Remedies.*

Every case ought to be to a physician an occasion of verifying an old successful mode of treatment, or of trying carefully something, either altogether new, or newly modified. Every new remedy should be duly tried by every one, and its application extended. Physicians have golden opportunities, but they do not, like a great number of surgeons, make the most of them. They err fundamentally too in thinking anatomy has less connection with them than with surgeons. Our old physicians were all great anatomists.

*Annals of Medicine.**Indian cure for the bite of a Snake.*

A chicken was caught, the feathers plucked from the abdomen, and that part closely applied to the wound. The chicken instantly grew sick, and died as quickly as if its head had been cut off. A second was applied in a similar manner, it died in about four minutes. A third also experienced the same fate in nearly eight minutes. A fourth was applied; it

discovered some uneasiness, but did not die. The process was then discontinued, the boy was relieved, and was perfectly well on the second day.

DR. MADISON.

*Contagion.*

It is not many years ago, that a contagious *ophthalmia*, imported from Egypt, was then triumphantly announced. It was in vain to represent that this new disease did not break out until several years after our communication with Egypt had ceased, where it was an endemic disease, and had never been suspected to possess any contagious quality; that in England it was altogether limited to marching regiments of the line; that it did not affect militia regiments in the same barracks, nor the officers, nor the inhabitants of the same place when in quarters; and, moreover, had it been contagious, there could scarcely have been an eye left among the medical staff of the ophthalmic regiment and hospitals, who were constantly employed in the closest and most intense examination of their patients, and who, knowing besides that there was only one infectious *ophthalmia*, the gonorrhœal, inserted the discharge into their own eyes with impunity, and published the result of the experiment. The disease, nevertheless, kept its ground under the title of the *ophthalmia* pestilence; its course was traced, its laws defined, and powers described, until the detection of a deeply organized *ophthalmia* conspiracy amongst the soldiers, assisted by a wise distribution of pensions, and amelioration of the mistaken discipline which then prevailed, put this Egyptian disease to flight, and it has been no more heard of as a spreading contagion anywhere, I believe, except in our schools of public instruction; for it is there that the minds of our youthful students are imbued with prejudices which stick to them through life, and impede their future progress at every step in the investigation of truth.—DR. FERGUSSON.

## Hospital Reports.

### ST. THOMAS'S HOSPITAL.

#### Taliacotian Operation.

GEORGE DOUGLAS, the man who underwent the Taliacotian operation at St. Thomas's Hospital (the particulars of which will be found in No. 20, page 639, of this Journal), was on Friday the 27th of July, brought into the operating theatre, for the purpose of having the twisted portion of the new nose divided. Eight weeks have now elapsed since the former operation was performed; every part has completely cicatrised, and his countenance is much improved in appearance from the operation. Mr. Green, after dividing the twisted integument, was obliged, owing to the hæmorrhage that ensued, to secure two small vessels, and to place some amadou on the fresh wound; the sides and internal, or posterior part of the new nose, were cut and ingrafted into a fresh cut surface between and rather below the superciliary ridges, and retained in that situation by common sutures. Owing to the irritation which had been previously produced by the adhesive plaister, none was applied at this time. The vascularity of the part was remarked by Mr. Green, as much greater than during the former operation. It was very remarkable, that during the time he was cutting the new nose, the man complained of *experiencing* the pain in his forehead.

#### SCURVY.

George Moxam, a pie merchant, aged 35, pale, and of a debilitated constitution, was admitted into Jacob's Ward, under the care of Dr. Elliotson; states that he has been subject to dyspnœa for the last seven years, which he concludes was brought on from his being exposed to all kinds of weather while selling his pies.

His present complaint has been coming on for the last six months, since which time the dyspnœa has left him; previous to and since his present complaint he has felt very weak, especially about his joints. His left leg and foot are covered with ecchymoses, one of which is of great extent; the muscles at the back part of the right leg are indurated, and the leg with the foot of the same side, have also ecchymoses on them; he suffers very little pain, and that only from stooping; his gums are spongy, and often discharge blood; he has been in the habit of living well, taking meat usually three times a-day; his pulse is feeble, but rather quick, bowels regular.

He was ordered by Dr. Elliotson to take half an ounce of lemon juice every six hours, and to have meat daily.

Under this treatment he continued up to 31st of July; he began to improve soon after taking these medicines, and continued so to the 31st, when he left the Hospital, cured.

### MARY-LE-BONE DISPENSARY.

#### DR. SIGMOND ON THE CHOLERA.

In the course of some clinical observations at the Mary-le-Bone General Dispensary, Dr. Sigmond observed, that the ancients did not always apply the term cholera to the overflow of bile, and that Alexander Trallian distinctly states, that it is not universally admitted that the word is derived from  $\chi\omicron\lambda\omicron\varsigma$  bile, but from  $\chi\omicron\lambda\alpha\delta\epsilon\varsigma$  the bowels, in consequence of the immoderate discharge of their contents. Dr. Sigmond further observed, that the cure of the collapsed stage of cholera, seems to have been as little understood by the ancients as by the moderns. Aretæus, after giving a very accurate description of the disease, acquaints us with his mode of cure, but recommends the medical man, if he should not be successful, as soon as his patient becomes cold and blue, and his pulse scarcely per-

ceptible, to find some decent excuse to take himself off as speedily as possible. The words of the Latin translation are, "si omnia vomitu rejiciat, sudor non cohibendus effluat, homo frigidus fiat ac lividus, pulsus jam pene sit extinctus et æger defecerit, in his rebus nihil medico magis expedit quam ut honestam inveniat aufugiendi causam.

ROYAL COLLEGE OF PHYSICIANS,  
LONDON.

A PETITION has been presented against this body to the House of Commons by Mr. Hume, and was ordered to be printed.

It is lamentable that an institution, which, under proper management, would have conferred honour on the profession, has, by the selfishness of its rulers, been for centuries opposed to the best interests of science, and of the healing art.

NECROLOGY.

BARON PORTAL, member of the Institute, formerly physician to Louis XVIII. and Charles X., professor of anatomy at the Royal College of France, member of the Council-General of the Hospitals, &c. died of a fever occasioned by a long-continued affection of the stone. He was born at Gaillac (Tarn) on the 5th of January, 1742, and consequently was in the 91st year of his age.

The celebrated chemist, Count Chaptal, a peer of France, member of the Institute, and who, under the Empire, was minister of the interior, died on Sunday the 29th instant, in the 77th year of his age.

At Cambridge, of cholera, Mr. Johnson, surgeon.

At Sheffield, in his 30th year, John Overend, M.D.

At Limerick, John Sandes, Esq. medical guardian of the County Limerick Infirmary.

On Monday last, of cholera, Dr. Allsop, at Birmingham. The seizure, death, and burial of this gentleman happened in 14 hours.

BOOKS.

THE Anatomy and Physiology of the Organ of Hearing; with Remarks on Congenital Deafness, the Diseases of the Ear, some Imperfections of the Organ of Speech, and the proper treatment of those several affections. By David Tod, M.R.C.S. 8vo. pp. 147. 1832. Longman and Co. Plates.

Clinical Reports of the Surgical Practice of the Glasgow Royal Infirmary. By John Macfarlane, M.D., Member of the Faculty of Physicians and Surgeons of Glasgow, Senior Surgeon to the Royal Infirmary, Lecturer on Clinical Surgery, &c. &c. Robertson, Glasgow; Black, Edinburgh; Highley, London. 1832. pp. 314.

The Guide to Knowledge. Edited by Mr. W. Pinnoek. Part I. pp. 48.

••• We observe that the department of natural history in this unpretending production, is written by Professor Rennie, and is exceedingly interesting; the astronomical portion adds considerably to its value.

NOTICES TO CORRESPONDENTS.

WE have been favoured with the following hints by correspondents, which shew how far behind the present race of knowledge some persons are:—

"A Subscriber" complains we give too much Irish medicine, but assures us he does not insinuate that it is worse than any other.

"A Well-wisher" thinks we extract too much from the Edinburgh and Glasgow Journals and Midland Reporter; while

"Senex" alleges that we insert too much from the French, German, and Italian periodicals; and another suggests we should give more foreign medicine.

Now to all these charges we plead guilty, but offer in palliation of our offence, that we are simple enough to imagine, that a concise and faithful view of the improvements and discoveries in medical science, in all countries, would be most acceptable to readers of the present day, and that few, if any, of our profession, would hesitate to receive information, whether offered by our brethren in Ireland, Scotland, France, Germany, Italy, or America. We have the best reason to know, that nine-tenths of our readers approve of our plan, and this is proved by the unprecedented success of this Journal. Nevertheless, we thank our correspondents for their suggestions, but we decline acting upon any of them. We consider that the medical is an integral part of the public press, and that it ought to be conducted on the same broad principles; and therefore we shall continue to exhibit the most complete and comprehensive history of the progress of medicine in all countries; being firmly convinced that this plan of conducting a Journal is best suited to the spirit of the age in which we live. Other periodicals, conducted on the narrow plan suggested above, are rapidly progressing to oblivion.

Juvenis has been received; we cannot help thinking that he has mistaken our correspondent's intention, who, we feel convinced, is desirous of ascribing all honour wherever it is due; for that reason we have not given it insertion. Should, however, our correspondent favour us confidentially with his name, and be still desirous of its insertion, we will give it due publicity.

Mr. Stone's paper is under consideration.

Mr. Radford's valuable communication in our next.

••• The price of the Number is slightly increased this week to cover the additional expense of the Index; it will only occur when there is an Index and Title-page given, consequently it will be but twice a year.

# London Medical and Surgical Journal.

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SATURDAY, AUGUST 18, 1832.

VOL. II.

SELECTIONS  
FROM THE  
CLINICAL LECTURES,  
DELIVERED AT THE  
HOTEL-DIEU IN PARIS,

*During the Session of 1831-32;*

BY BARON DUPUYTREN,

PRINCIPAL SURGEON OF THAT HOSPITAL.

*On the Treatment of Fractures of the Fibula,  
and Luxations of the Foot.*

THERE was, perhaps, scarcely any surgical disease, whose treatment has been, up to the present day, so uncertain and so inefficacious, as that of fracture of the fibula, with dislocation of the foot. Nevertheless there is not one which, on account of its frequency and the severity of the symptoms with which it is complicated, more imperiously requires a fixed treatment, certain in its results, and founded on principles acknowledged by experience. This imperfection of therapeutics depended on two causes; one, which I shall call theoretical, consisted in the insufficiency of the notions which had been acquired on the disposition and respective uses of the great variety of organs which constitute the lower portion of the inferior extremity, and on the mechanism of the causes which produced the fracture and luxation. The second, which may be considered as a consequence of the first, was the imperfection of our means of reduction, and especially of the means of maintaining the parts when reduced in their proper relations with each other. In fact, if we compare the ancient methods with the mode of action of the powers of motion of the limb, we shall see that not one of them was capable of keeping the limb reduced when it has been effected. Pott, who has alone described a plan by which it can be reduced without difficulty or

effort, has not indicated any means by which the reduction can be preserved. The want of success, resulting from the preceding causes, was still exceedingly increased by the mistaken opinions which had been formed on the opportunity of reduction according to the nature of the complications. I employ the gentle plan of Pott for effecting the reduction, and have discovered a measure, certain in its effects and results, for maintaining the parts reduced in exact apposition until perfect consolidation.

*Curative indications.*—If we look at the fracture by itself and abstractedly, the first and only indication which presented itself to be fulfilled, is to prevent displacement of the fragment. Repose and immobility of the limb suffice in fact to attain this end, and effect a cure, whenever there is only a simple solution of continuity, whether it takes place at more or less than three inches above the inferior extremity of the fibula. These means, joined with reduction, will also suffice, if the fracture is only complicated with a simple displacement of the foot, in whatever direction it occurs; and then they ought to be put in action immediately, in order to prevent the serious accidents and deformities which may result. But there is a question, which is very important to be resolved, because the safety of the patient depends, in the majority of cases, on the manner in which it is examined—does there exist any species of complication of fracture of the fibula, which counter-indicates reduction? All the kinds of disorders which we have already described, are the immediate effect of the force which has produced the fracture, or the consecutive effect of the fracture itself. Going on this principle, conformably to the nature of things and observation, that, in every case, the accidents are kept up, exasperated, and carried to the highest degree of intensity, by the cause which has produced them, and that they will become more injurious the longer the cause continues, I admit this as a general rule, that the most certain and prompt method to arrest them, is to re-

duce the parts at all periods of the disease. This was also the opinion of Desault, who gave the example of effecting the reduction when the inflammatory symptoms were at their height, but whose apparatus for maintaining the parts in apposition cannot be recommended.

**Reduction.**—There is not any reduction which can be brought about more easily than that of fractures of the fibula, with displacement of the foot, when the means of conquering the resistance of the muscles has been discovered. The obstacles arising from this resistance have exercised the ingenuity of professional men from the time of Hippocrates to the present day. In order to effect this object, it is sufficient to flex the leg on the thigh, and to attract powerfully the attention of the patients to some other object. The muscles immediately lose their state of tension, the resistance ceases as it were by magic, and the parts retake their situation and natural relations, almost without effort, and, as it were, of themselves. Nevertheless, however exact the reduction thus obtained may appear, it is always incomplete, the fragments of the bone remain driven in by the side of the tibia, the foot preserves a continual tendency to yield to the action of the lateral peroneal muscles, and to be displaced outwards. We, therefore, require also an agent by which we can raise up the fragments, separate them from the tibia, and bring them in some sort in apposition with each other. What is this agent to be? In the first place, it is impossible to act on the superior fragment which is never driven in, and which on the contrary is almost always projecting; it can only be made to act on the inferior portion, and consequently through the medium of the foot. Now there exists such an intimate connexion between the latter and the malleoli, that when it is strongly turned on one side, one of them is directed upwards, and the other drawn downwards in the same proportion. From this you will perceive that you will be enabled to raise the inferior extremities of the fibula, only by exercising oblique traction, that is, by powerfully adducting the foot. The external lateral ligaments, not being capable of extending beyond a certain point, will exercise on this fragment a degree of traction, which will be more powerful the more forcibly the internal edge of the foot is carried inwards. In this manner the inferior extremity of the tibia becomes buried in the depth of the articulation, the astragalus is pushed from within outwards, the inferior fragment of the fibula executes on the former a see-saw motion in the contrary direction to that which has displaced it, and it is thus replaced in apposition with the superior fragment.

**Apparatus for maintaining the parts reduced.**—It is evident, that the position which has rendered the reduction of the fracture so

easy, by bringing the muscles into the state of relaxation, is also the first measure to be employed to keep the parts reduced. But you will easily conceive that it would be imprudent to abandon thus to itself a fractured limb, and that it is necessary that some apparatus be made use of to keep the bones in apposition, until the callus is formed, and become solid. This must necessarily be more or less modified, according to the species of dislocation which accompanies the fracture.

A pillow, a splint, and two bandages, constitute the whole apparatus which I have employed, with so much success for more than 25 years, in cases of fracture of the fibula complicated with *dislocation inwards*. The pillow, made of linen, and two-thirds filled with balls of oats, ought to be about two feet and a half long, four or five inches wide, and three or four thick. The splint, about eighteen or twenty inches long, two and a half inches wide, and three or four lines thick, ought to be made of a firm and very slightly flexible wood. The bandages, made of half-worn out linen, ought to be about four or five ells long.

The pillow, doubled in the form of a cone, is applied on the internal side of the fractured limb, and extended on the tibia, its base directed downwards and supported on the internal malleolus without going beyond it, its apex upwards and on the internal condyle of the tibia. The splint, applied along the pillow, ought to go beyond it inferiorly for about five or six inches, and extend for three or four inches below the internal edge of the foot. These parts of the apparatus are affixed to the upper part of the leg, by some turns of the bandage, directed from above downwards.

In this state, the splint, prolonged like an arrow beyond the base of the pillow, leaves between it and the foot an interval equal to the thickness of the pillow, that is to say, about three or four inches; this extremity of the splint serves, as a *point d'appui*, to bring the foot from without inwards. In order to effect this, one end of a second bandage is applied on it, and then successively brought from the splint over the superior surface of the foot, under the sole, over the splint, then from this over the ankle and under the heel, to return again over the splint, and continuing in the same manner until the whole bandage has been used. By thus embracing in the same circles, which can be shortened at pleasure, the splint and ankle, and the splint and heel alternately, the foot is brought into such a state of adduction, that its external edge becomes inferior, the sole is directed inwards, and the internal edge upwards. As the foot yields to the action of this apparatus, the tibia, pressed on by the base of the wedge which the pillow represents, and on which the whole mechanism is supported, is pushed outwards as well as the astragalus.

The inferior fragment of the fibula, driven upwards by the tibia, and drawn downwards by the external lateral ligaments, executes on the external edge of the astragalus, the see-saw motion of which I have spoken, and by which it is brought into its natural situation. In order to obtain a complete reduction, you must not be contented with bringing the foot under the leg, but, continuing your efforts at reduction, the apparatus should bring it as much inwards, as it had been carried outwards by the fracture.

This apparatus, besides the advantage of effecting the reduction without force and almost without pain, and of maintaining the parts fully reduced, has also another no less useful. By leaving between the two bandages a considerable interval, in which the articulation and the site of the fracture may be seen, it allows of the application of whatever topical remedies the primitive or consecutive complications may require.

The same apparatus is equally applicable in all cases of fractures with simple *luxation* of the foot outwards. To render it applicable to cases of *dislocation outwards and upwards*, it is sufficient to place it outwards, that is to say, along the fibula, instead of the tibia.

But the cases of *luxation backwards* offer much greater difficulties than the preceding, both as respects the reduction, and the keeping the parts reduced. In the first case, the difficulty arises from the resistance the muscles oppose to the elongation of the parts, and the re-establishment of their natural relations; in the second, the superior surface of the astragalus, convex from behind forwards, is so slippery, that it is with great difficulty that the tibia can remain perpendicularly on the pulley of this bone, and it tends constantly to pass forwards, while the astragalus, incessantly acted on by the extensor muscles of the foot, the action of which is much greater than that of the flexors, has a continual tendency to be drawn behind the lower extremity of the tibia. To this double action, powerful resistance must be offered, if we are desirous of effecting a cure without deformity. The means of doing this consists in a simple modification of the apparatus which I have just described, and of the manner of applying it.

To the pieces already enumerated, a small pillow, of several inches square, filled with bran, is to be added. The larger pillow, folded into a cone, is placed on the posterior surface of the leg, and extended from the heel to the bend of the knee, the base downwards, the apex upwards. On this pillow the splint is to be applied, which is to be fixed to the superior part of the leg by means of a bandage; a second bandage embraces the inferior extremities of the leg and splint; this is the part of the apparatus which really acts. The little pillow is destined to cover the tibia, to preserve it from compression

from the bandage. This, by exerting pressure on the splint and on the bandage, carry by the same force, the heel forwards and the tibia backwards. The energy of this agent is such, that we have only to fear its acting too powerfully.

Fractures complicated at once with *luxation* of the foot inwards and backwards, are almost always cured by the treatment of that one of the two displacements which predominates. In the contrary case, it is easy to combine the two apparatus which I have described, so as to fulfil this double indication.

In support of the principles which I have just laid down, I shall detail the history of some cases, which will enable you to comprehend still better the most remarkable circumstances of this disease, and the most prominent results of the treatment.

CASE 1.—*Presence of presumptive signs only. Subsequent development of those characteristic of the injury.*

M. D. was walking on a narrow path, when the earth giving way under the left foot, the body lost its support on that side; a rapid motion immediately threw its weight on the right limb, but the yielding of the earth continuing, the body fell down a declivity into a ditch, on the internal side of the right leg, which was bent, and semi-flexed under the pelvis. Severe pain was experienced at the moment of the fall, and the patient could not rise. He was conveyed home without having made any effort or attempt to walk, or to support himself on the painful limb.

I was called in about eight or ten hours after the accident, and found the foot and leg in their natural situation. The foot did not offer any traces of preternatural mobility to one side or the other, nor the malleoli the slightest indication of a solution of continuity. The patient did not suffer when in the state of semi-flexion, which he had instinctively chosen, nor in the movements which he made with the foot, nor from the examination which I instituted. Nevertheless he could not support himself, however slightly, on that foot, without suffering severe pain above the external malleolus; the finger could not be pressed on this point, without renewing this pain each time, which caused the patient to complain, and withdraw his limb. There was also an ecchymosis at this part, which extended up the fibula, and around and below the external malleolus, as far as the corresponding side of the foot.

But there was neither mobility, sensible crepitation, nor deviation of the foot outwards nor backwards, the only characteristic signs of fracture of the fibula. Nevertheless, I was of opinion that one existed, but without displacement, and directed semi-flexion of the limb, resolving applications and rest, measures equally indicated in case of simple sprain or contusion.

At the end of a few days, at the instigation

of a friend, careless of my advice, the patient got up, taking care scarcely to touch the ground with the injured limb; from this attempt he merely experienced a little pain. Emboldened by this, he determined to try whether he could not support his body on the limb; scarcely had he made this dangerous attempt, than he felt severe pain, accompanied by a cracking and tearing sensation; he fell, and could not rise again. Called in again, I found the displacement of the foot outwards, mobility, and crepitation. I applied the apparatus which I have described, and the patient was perfectly cured in six weeks, in spite of some inflammatory symptoms, which disappeared without coming to suppuration.

CASE 2.—*Fracture: luxation of the foot inwards: serious symptoms: treatment by the new plan: cure complete without deformity.*

Jean Trouille, 26 years of age, slipped on the pavement, and fell on the right side of the body, the foot being adducted, and the leg flexed under the pelvis. He immediately felt a severe pain at the lower part of the leg, and endeavoured to rise, but not being able to walk, he was conveyed home, and the next day carried to the Hôtel-Dieu.

*Symptoms.*—Deviation of the foot outwards, such that the axis of the leg, prolonged below the inferior extremity of the tibia, instead of falling on the astragalus, would leave that bone, and the whole of the tarsus externally to it; rotation of the foot on its axis, by which its internal edge is directed downwards, the sole outwards, the external edge and dorsum upwards; considerable projection of the tibia and internal malleolus, and in that situation extreme tension of the skin, and phlyctenæ full of a reddish serosity. On the other side, a deep depression and wrinkled state of the skin, about two inches above the external malleolus; sudden disappearance of all the symptoms on the slightest effort at reduction, and their spontaneous return as soon as the effort ceases. Besides, severe pain at the lower part of the fibula; inequality, mobility, crepitation, evident displacement of the fragments, and so great a facility of carrying the foot across, that one would suppose the malleoli and their ligaments destroyed; these being all incontestible signs of a fracture of the fibula, with luxation of the foot inwards.

*Accidents.*—Ecchymosis, extending from the point of the fracture and the internal malleolus to the corresponding surfaces of the foot and leg; considerable tension and tumefaction around the articulation; severe pain, alleviated on placing the foot in its natural position. The house surgeon merely applied a poultice; the next day, an œdematous puffing state of the parts increased still more the tumefaction. I reduced the limb, and kept the parts in apposition by my apparatus. He

was also feverish; venesection, demulcent drinks, sedative draught, and absolute diet.

On the third day, the pain ceased, and he slept during the night, but the swelling continued, which was attributed to the tightness of the bandages, and they were accordingly loosened; on the fourth day, the same tumefaction, darting pains, redness, heat towards the external malleolus, fever; leeches were applied the whole length of the fibula. On the fifth, fluctuation was observed in the centre of the ecchymosis, and the fever continued; leeches were re-applied. On the sixth, the tumefaction and tension diminish, there is less fever, fluctuation more apparent; sedative resolving applications (acetate of lead) were employed. On the seventh, the patient continued improving, but there was evidently a cavity containing a fluctuating fluid, extending from near the head of the fibula towards the situation of the fracture. It was supposed to contain effused blood; the same applications were made use of, with the addition of camphorated spirits of wine. On the ninth, improving, the absorption of the blood commencing.

On the tenth, in consequence of the patient inconsiderately moving, the apparatus became deranged, severe pain came on, phlyctenæ formed in several parts of the limb, with pain. On the thirteenth, these symptoms disappeared, the phlyctenæ being replaced by superficial ulcerations; the tumefaction being nearly entirely removed, we were enabled to ascertain that the internal malleolus was fractured in its base. The absorption of the blood is no longer doubtful, the extent of the cavity is reduced one third. On the fifteenth, the limb was placed alternately on the internal and external side, in consequence of the patient complaining of the one position.

On the fortieth day, the fracture is consolidated, without deformity; the apparatus was removed; discharged on the sixtieth day.

CASE 3.—*Simultaneous Fracture of the inferior extremities of the Fibula and Tibia: serious accidents: treatment by the new plan: cure with very slight deformity.*

F. C. Michel, aged 48 years, while descending a stair-case, suddenly turned his foot outwards, which was accompanied with severe pain at the inferior and external part of the leg. This limb, thrown outwards, and bearing on the internal malleolus on the one hand, and on the knee on the other, had to support the whole weight of the body, which caused a new pain, more severe than the other, at its inferior and internal parts. The patient was immediately taken to the Hôtel-Dieu.

There existed pain, tumefaction, preternatural mobility, crepitation; and besides, 1st, deviation of the foot outwards, forming an obtuse angle, without ecchymosis, mobility, and manifest crepitation at the inferior

and external part of the leg, the characteristic signs of fracture of the fibula; 2ndly, displacement of the foot backwards, extension of this part on the leg, a projection at an inch and a half above the articulation, formed by a fragment belonging to the body of the tibia; 3dly, displacement of the inferior extremity of this bone backwards, which had accompanied the foot in this motion; evident fracture of the tibia.

The house-surgeon merely reduced the limb, and placed it in the common apparatus for fractures of the leg. Inflammation, attended with severe pain, supervened, and phlyctenæ formed. The next day the effects of the reduction were null. I again reduced it, applied my apparatus, covered the parts with sedative, resolving applications, and directed venesection to be performed, and the patient to have refreshing drinks.

On the third day the pain was relieved, the progress of the tumefaction arrested, the phlyctenæ covered with simple cerate. On the fourth and fifth, the suppuration of these latter began to diminish. As it appeared that the projection of the inferior fragment of the tibia was on the point of forming again, attempts were made to push the inferior portion of the foot forwards. On the 8th, eschars had formed on the prominence of the superior portion of the tibia, and opposite the fracture of the fibula; the patient was agitated; tonic drinks. 12th. The tumefaction lessened, the sloughs are beginning to separate, the bones do not appear to be denuded, but the extensor tendons are. 13th. The pus, which lay under the skin, was expelled by means of gentle pressure and methodical dressings; removal of the fracture apparatus. On the 16th, the double displacement of the foot outwards and backwards, and the prominence of the broken portions are reproduced; the apparatus is re-applied, with the addition of a *sous-pied* fixed to it, to bring the inferior portion of the tibia in apposition with the superior.

From the 16th to the 20th, the dressings were renewed twice in the twenty-four hours. To effect this, all that was necessary was to raise the bandage applied round the foot and the inferior extremity of the splint. From the 20th to the 24th, the pus, in spite of every attention, remained in front between the tibia and fibula; an abscess formed in front of and below the fracture of the former bone. On the 26th, the abscess was opened, and the pus evacuated. On the 31st, the skin has united, the swelling has almost entirely disappeared, and the leg is in very good condition.

The fortieth and following days, pain was felt on the external side of the leg, opposite the fracture of the fibula, which was attributed to the weight of the limb, and the pressure exercised on part of the wound. The apparatus was removed, and the limb placed on the opposite side. On the forty-

fifth, deviation of the foot outwards and backwards again occurred; perfect consolidation has not yet taken place. On the forty-seventh day, the apparatus was re-applied as on the sixteenth day. From the forty-seventh to the fiftieth, the flexion of the foot became painful, and was diminished.

On the sixty-sixth day, exfoliation of the extensor tendons, which had been going on for some time, took place; the callus appeared to be firm; the apparatus was removed, and replaced by pasteboard splints applied on all the surfaces of the limb, and supported by a bandage.

On the sixty-ninth day, the foot appeared still to be turned outwards; the apparatus was then applied for the third time, and kept on for forty days consecutively; it was not removed until the 110th day, when the callus appeared quite firm.

Some time after the patient began to walk with crutches. A stiffness of the articulation of the foot, very analogous to false ankylosis, adherence of the extensor tendons to the cicatrix, a slight deviation of the foot backwards and outwards, and a projection forwards of the superior portion of the fractured tibia, rendered convalescence long and difficult. It was only after 180 days, treatment and convalescence, that the patient was able to leave the hospital, and to make use of his limb, although it had less motion than the other, and some deformity existed, which was incurable.

*CASE 4.—Results of the ancient methods, in cases without serious accidents.*

M. J. P. F. C. at that time a student in medicine, running with a comrade, came on a pit of which they were not aware, and fell from a height of thirty feet on a dry and stony ground; both fell on their feet, but one had only a sprain, while the other, M. C. had a fracture of the fibula with rupture of the internal malleolus, and double displacement of the foot inwards and backwards, thus characterised—first, the fracture of the fibula, by a depression at the external side and inferior point of the leg above the malleolus, and by the projection of this outwards; secondly, the rupture, by another unequal and rugged prominence, of the inferior extremity of the tibia under the skin of the internal and the inferior part of the leg, and by an unequal and rugged depression, some distance below the tibia, formed by the malleolus itself, which was carried downwards and outwards; thirdly, the luxation of the foot inwards and backwards, by the deviation of this part outwards, the direction of its external edge and dorsum upwards, of its internal edge downwards, the sole outwards, and finally by the projection of the inferior extremity of the tibia at the anterior part of the articulation.

Assisted by his comrade, M. C. himself reduced the dislocations, endeavoured to keep them reduced by a handkerchief placed in



figure of 8 around the articulation of the foot, and was taken to Paris in a coach. During the journey considerable tumefaction took place around the articulation, especially at its internal surface, and displacement of the foot, but in a minor degree. On his arrival, the parts were replaced, and the ordinary apparatus for fractures of the leg applied, with this difference, that the lateral splints descended below the foot, and the bandages, applied as high as the malleoli, were drawn very tight. When at his house he was bled from the arm, nevertheless the tumefaction increased, fever came on, he became delirious.

The second day, the apparatus was raised in order to dress the limb, the swelling extended as high as the knee and thigh; the foot appeared in the natural position; emollient poultice, and re-application of the apparatus; to be bled twice. On the third day, spasmodic contractions; syrup of diacodium, which procured a little rest and sleep. On the fourth, phlyctenæ on the anterior and internal surface of the articulation; swelling of the inguinal glands. Fifth and sixth, the swelling diminishing; the pain at the heel relieved by the application of a wet compress to the tendo Achillis. On the seventh, the pain and inflammation lessened, but compresses dipped in camphorated brandy having been substituted for the poultices, excited the pain anew, and caused an attack of erysipelas. On the eleventh, the phlyctenæ are replaced by small ulcerations; resolving and emollient applications daily. The fifteenth, the swelling of the foot had diminished so far as to allow a depression of the fibula, accompanied by a projection of the external malleolus, to be perceived. No means were employed to place the parts in their natural position, and it was considered sufficient to tighten the bandage placed over the fracture.

On the twenty-fourth, the pain in the ankle continued, and that of the heel diminished; the ulcerations cicatrized. On the thirtieth, the apparatus was renewed; the parts are in the same state as before. On the forty-fifth, it was entirely removed, and replaced by a figure of 8 bandage around the articulation.

The depression of the fibula towards the tibia, the projection of the external malleolus outwards, and of the internal inwards, exist, the leg is, as it were, atrophied; the movements of extension and flexion are very limited, and those of abduction and adduction still more so.

At the fiftieth day, the patient got up, but suffered severe pain on putting the foot to the ground. He exercised himself for a month in walking with crutches.

On the eightieth day, the movements of flexion and extension were still constrained, and progression difficult. Severe pain still continued in the articulation of the foot with the leg, in that of the bones of the tarsus with the metatarsus, at the heel, and espe-

cially at the anterior and internal ligaments of the tibio-tarsal articulation.

At the end of eighteen months, that is to say, twenty-one months after the accident, in spite of continued exercise, and the use of emollient and sulphurous baths, opiate poultices, liniments of various kinds, motion was yet very restrained. The patient himself, who is the author of this observation, says, "If I walk for any time, or remain standing, I suffer especially in the ligaments of the tibio-tarsal articulation; the extremities of the tibia and fibula are enlarged; the leg has only gradually resumed its volume, and is even now a few lines smaller than the left."

Such was the result of the ancient method applied to a slightly-complicated fracture of the fibula, which was treated by one of the first surgeons of Paris, seconded by the courage and intelligence of a patient already initiated in a science which he has since honoured by his talents.

*CASE 5.—Results of the ancient plan in a case of Fracture, without any remarkable complication.*

Lefevre, being employed working at the glacis, was thrown down a height of twelve feet, by a quantity of earth, under which he lay buried for several minutes. When disengaged, he presented at the inferior part of the left leg a fracture, accompanied by a luxation of the foot inwards, and by torsion of this part on itself, so that the sole was directed outwards, the external edge upwards, the internal downwards. A great quantity of blood was effused and infiltrated around the articulation; the skin was intact.

The parts were reduced to their natural situation by the ordinary efforts of reduction, and the limb placed in the common apparatus for fractures of the leg; the patient being young and of a sanguine temperament, was bled several times, and put on absolute diet.

The apparatus was raised at the end of eight days. A considerable displacement of the foot, with torsion from within outwards, had been produced; a large abscess existed on a level with the internal malleolus; it was opened, and a large quantity of sanguinolent and foetid pus evacuated; its cavity was filled with charpie. The apparatus was replaced by a simple bandage, and the care of keeping the foot in situation was confined to splints placed on the sides of the articulation, and to a simple sole of wood. From this period the displacement had no bounds; severe continual pain, enormous tumefaction, violent fever, with exacerbation and delirium, were developed; the skin stretched, inflamed, thinned, mortified, came away in portions, exposing the extensor tendons of the toes, which exfoliated, and the extremities of the tibia and fibula, both of them fractured, the first at its base, the second at two inches above the malleolus. Very abundant suppuration set in, the patient lost his sleep and

strength, fever and colliquative sweats set in. Amputation appeared indispensable, nevertheless it was not performed. Opium, bark, the multiplied dressings, but especially the youth and good constitution of the patient, saved him. At the end of a few months, the severity of the symptoms abated; splinters detached from the tibia and fibula at the time of the accident; others formed afterwards in consequence of necrosis, were removed by suppuration. The actual cautery was several times applied to the bones to hasten the exfoliation.

At the end of a year the suppuration began to diminish, fleshy and vascular granulations formed on the bones, and the fractures became consolidated. At the end of eighteen months the cicatrix was formed, partly by bringing together the edges of the skin, and partly by the production of a new cutis.

The limb was then semi-atrophied, the foot totally incapable of supporting the body in any way, and besides, it was as much everted as at the first day of the accident. Two years later, after the use of a compressive bandage, a dog's skin stocking, baths, and douches, the limb became rather fuller and stronger.

Forty-two years after the accident, when the patient was upwards of sixty years of age, he came to consult me for a dartrous affection. The signs of the fracture were then so evident, that, although I had several drawings made of the parts, I could not get them exactly represented. Besides, progression was always very difficult, the motions of flexion and extension of the foot very weak, and those of adduction and abduction null; there were also numerous varices, considerable tumefaction, increased on walking, &c. &c.

*CASE 6.—Fracture with luxation inwards, and wound on the external side of the articulation; treatment by the ancient method; amputation; death.*

Madame L. still young, seeing that her horse would throw her into the river, leaped from her carriage, fell on the internal edge of the left foot, experienced severe pain at the bottom of the leg, and fell at her full length on the ground.

A displacement of the foot, so that its internal edge was directed upwards, the sole inwards, and the astragalus outwards; a deep and extensive wound on the external side of the articulation of the foot, between the tendons of the lateral peroneal muscles on the one hand, and of the little peroneal, and the common extensor muscles of the toes on the other; the passage through this lacerated wound, of the fractured fibula and tibia, the first at two inches from its extremity, the second at the base of its malleolus, were successively recognized; the pain was excruciating.

After the reduction, the bandage of Scal-tetus\* was applied, and the limb placed on a pillow, being in a state of extension on the thigh. On the second day the apparatus was raised; the reduction had not removed the pain, it still continued; insomnia and continual spasms. Amputation was proposed in consultation, but was rejected by the friends. The bandage was re-applied, and the limb placed as on the preceding evening; venesection, sedatives.

On the third and fourth days, insomnia, pain, spasms; the patient complaining very much. On the removal of the apparatus, an elastic tumour was found surrounding the articulation; a mixture of fœtid pus and disorganized synovia covered the surface of the wound. Towards the eighth day the preceding symptoms had increased considerably, nervous susceptibility being also exceedingly high.

In the evening of the ninth, north winds suddenly succeeded those from the south; from that time, involuntary, painful, permanent contractions, in the calves, masseters, pharynx, and posterior part of the neck; difficulty of swallowing, continual spitting, inclination of the head backwards, painful, short, unequal, hurried respiration, pulsations of the heart frequent and tumultuous; pulse quick, rapid, and as it were bounding; cold sweats on the whole body; displacement of the fragments, accompanied by intolerable pain at each tetanic shock; cries, continual agitation, countenance expressive of great agony; (liquid laudanum of Sydenham, in the dose of several drachms during the day;) no relief.

On the tenth, the tetanic affection extending over nearly the whole body, which is curved in a circular arch, and raised, at each attack, above the bed, being supported on the occiput and heels; (narcotics in stronger doses, but without success). On the eleventh, the apparatus was raised, and phlegmonous inflammation was found on the internal side of the tibia; (emollients, narcotics). Twelfth and thirteenth, tetanic symptoms continue; so great is the susceptibility that the slightest sound, the most feeble light, the least motion of the air, the contact of unequal surfaces, the slightest emotion, is sufficient to bring on an attack. The abscess formed by the side of the tibia was opened, and a great quantity of pus evacuated. It was decided in consultation, that the limb should be abandoned to itself, and the dose of laudanum raised to several spoonsful during the day, as well by the mouth as the rectum.

On the fourteenth and fifteenth days the foot had been displaced inwards, so as to form a right angle with the leg. The tibia and fibula protrude through the wound; the tetanus, and the accidents which accompany

\* A bandage, somewhat similar to the 18-tailed bandage.... EDS.

it, are carried to the highest degree of intensity; it seems to have extended to the alimentary canal; the liquid ingesta are repelled by the stomach, and rejected through the nares; the belly is distended, and as hard as a plank. Sixteenth and seventeenth days, the opium administered in enormous doses, which instead of inducing narcotism, does not give the slightest relief. Attempts were made, but infructuously, to reduce the extremities of the fractured bones, which form a projection of several inches externally, and on which the patient supports herself at every attack. In this state amputation, which had been considered insufficient a few days previous, was decided on, as the sole means of relieving the pain, and affording any chance of cure.

It was performed. The muscles appeared hard, strongly stretched, crackling under the instrument, black and carbonized, as it were, after being exposed to the air. The vessels of a certain calibre alone furnished blood; the others did not yield a single drop, and left the surface of the wound dry.

The symptoms however persisted. Towards the evening of the eighteenth day, there occurred a temporary relief for some hours; the patient died at eight.

*Case the 7th.—Reduction deferred on account of the symptoms; injurious consequences of this erroneous principle.*—A servant of M. T. having climbed up into a pear tree, the branch on which he was gave way, and he fell on the internal edge of the right foot; he experienced severe pain at the lower part of the leg, and in the articulation of the foot, which soon became considerably tumefied.

A country surgeon being called in, thought he had merely a sprain to deal with, and was contented with bleedings and resolving applications. Another, more skillful, being called in on the fifth, recognized, in spite of the swelling, the real state of affairs; but he was of opinion that the cessation of these accidents should be waited for ere reduction was attempted. Diluents internally, topical emollients, and leeches, were directed, and if an abscess formed, it was to be opened.

The accidents continue, increase, many parts of the thin and cellular tissue are threatened with gangrene, an abundant suppuration forms around the articulation, and the life of the patient being in danger, I was called in.

Struck by the extent of the displacement of the foot, of the prominence of the internal malleolus and astragalus inwards, of the deviation of the foot outwards, of the depth of the angle, which resulted from the inferior portion of the fibula being driven in towards the tibia (fracture of the fibula with luxation of the foot inwards), and by the severity of the existing symptoms, convinced that these depended entirely on the displacements mentioned, and would cease when they were reduced, I proposed an immediate reduction. The surgeon in ordinary of the patient, who

called me in, rejected this advice, considering the operation as useless and dangerous; useless he said, because it might be done later without difficulty; dangerous, according to him, because the parts were not in a state to allow of the manœuvres which it would require, being performed without injury.

The treatment was then continued as before; large eschars formed opposite the prominence of the internal malleolus, others opposite those formed by the superior fragment of the fibula, which not being in apposition with the inferior fragment, raised and stretched the skin very painfully. The whole of the subcutaneous cellular tissue was in a state of suppuration.

The violence of symptoms having diminished somewhat at the end of three weeks, the moment was judged proper for the reduction to be performed. It was attempted by extensions and counter extensions, which were very painful, and almost ineffectual; after which, an ordinary apparatus for fractures of the leg was applied, so that the internal splint did not project beyond the malleolus of that side, while the external passed below the corresponding edge of the foot, while a doubled pillow was also pressing this part from without inwards.

In vain were their efforts, the foot could not be brought into its proper place, either because the measures were not sufficiently efficacious, or because the soft parts still swelled by the inflammation, changed in texture, and incapable of yielding, would not allow the bones to regain their situation.

These attempts were renewed and suspended several times during the next fifteen days, but always without success, and were finally abandoned. Nevertheless, the patient, after incurring new danger from erysipelas of the leg, bilious fevers, excessive suppuration, colliquative sweats and fever, got well. But the limb is much deformed, and consequently progression very difficult.

*Effects of treatment according to the new plan.*—1st. The first and most important, all the others being merely the consequence of this, is the return of the foot to its situation, and natural relations with the leg; 2dly, the next is not less advantageous, being so exact a reduction of the fracture, that, in spite of the extensive displacements of the parts, there can seldom be found the slightest trace of the disease, or of the deformities which it had produced, when the treatment is finished; 3dly, the almost instantaneous cessation of the severe pain which the displacement caused; 4thly, the rapid diminution of the tumefaction, tension, and strangling, which supervene around the articulation of the foot; and, 5thly, the removal of all causes capable of giving rise to secondary symptoms. In fact, it prevents spasms, involuntary contractions, tetanus; inflammation and suppuration are much rarer, and in all cases, much less dangerous; it prevents the appearance of gan-

grene; the infiltrated or effused blood is absorbed with facility; lacerated wounds of the skin are not so dangerous, and cicatrize like ordinary wounds; finally, this plan removes danger from these various consequences, when it has not been able to prevent their coming on.

*General results.*—The duration of treatment, that is to say, of the application of the apparatus, is, in general, from twenty-five to thirty-five days in simple fractures, and in the most part of those which are complicated with displacement inwards, outwards or backwards, with infiltration or effusion of blood, rupture of the lateral ligaments, of the apex or base of the internal malleolus; from forty to sixty days for those which are complicated with serious injury to the soft parts, either internally or externally, splinters, and sometimes inflammation, suppuration, abscesses, &c. from sixty, eighty, one hundred, or more days, for comminuted fractures, or complicated with necrosis of the tendons and bones. Convalescence generally requires double the time of the treatment, whatever may be the nature of the fracture.

In all cases, the foot appears more or less carried inwards, or in the state of adduction, after the removal of the apparatus. But the action of the muscles, or, according to the case, the application of the apparatus externally, suffice; the first in a few days; the second in a few hours, to bring the foot into its natural position.

Out of 207 patients, treated by this method, 202 have been cured; five only have died, three from accidents dependant on the disease itself, and two from complication independent of it.

Of those cured, the limb has regained its natural form, excepting two cases, in which the heel remain a little elongated, and the inferior extremity of the tibia slightly projecting forwards. All have recovered a free use of the foot; one only having ankylosis of that part with the leg.

**OBSERVATION** led Newton to discover, that the refractive power of transparent substances was, in general, in the ratio of their density, but, that of substances of equal density, those which possessed the refractive power in a higher degree were inflammable. **ANALOGY** enabled him to conclude that, on this account, water even must contain an inflammable principle. And **EXPERIMENT** enabled Cavendish and Lavoisier to demonstrate the surprizing truth of Newton's induction, in their immortal discovery of the chemical composition of this fluid.—J. A. PARIS.

ON THE  
MEDICAL TOPOGRAPHY OF SOME  
PARTS OF PERU,  
RELATIVE TO  
*DYSENTERY AND INTERMITTENT  
FEVER.*

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THE distance from the city of Arica to that of Arequipa, *via Tacna*, is about three hundred English miles. The road or rather tract (for in that country roads are few and far between,) leads the traveller through a continuous desert, with the exception of the following narrow strips, or valleys, as they are called by the natives, where water is to be found, viz. Tacna, Samo, Loquumbo, Moquegua and Tomba. Tacna is distant from Arica fourteen leagues, to Samo from Tacna, nine—Loquumbo from Samo, eleven—Moquegua from Loquumbo, sixteen—Tomba from Moquegua, twenty-five—and to Arequipa from Tomba, twenty-five leagues. On this part, as on other places, along the west coast of South America, rain is not seen, and no water is to be found, except where a mountain torrent from the Andes gives a passage to the melted snow from the Cordillera of the coast, and the rain, which, on these sublime heights, falls in immense quantity during the rainy season. Several of the above-mentioned water courses have to be crossed by the traveller on his route from Arica to Arequipa, if he go by the way of Tomba. During the greater part of the year these channels are easily forded, that of Tomba alone is at all times of sufficient importance to excite the curiosity and apprehension of the traveller advancing towards it, and to make him inquire at the first one he meets from Tomba, "Como esta el Rio?" how is the river? Arica is situated at about 18½ degrees south latitude. All the above-mentioned places are north from Arica, and consequently within the tropic of capricorn.

Intermittent fever is always to be met with in Arica; the single tertian is most frequently seen; dysentery is not at all times met with—it is most prevalent in the months of autumn and beginning of winter, viz. March, April and May. The west coast of South America, from the northern boundary

\* We have copied this interesting paper from our cotemporary, the *Glasgow Medical Journal*, inasmuch as very little is at present known on a very valuable part of our science, namely MEDICAL TOPOGRAPHY; it is one which we hope will soon be more fully and completely studied than heretofore.—Eds.

of Chill, almost to Lima, a space of more than 1500 miles, is literally a desert, where there is neither vegetation nor water, and consequently no inhabitants, except at a few points, such as above referred to; but wherever water is met with, there vegetation is rank, and vegetable matter is more or less in a state of decomposition.

From the time of Sir Francis Drake, until lately, Arica was dreaded by all visitors, as being extremely noxious to health. The town is built close to the beach, and one part of it stands on ground rather more elevated than that which is next the sea. Close by the town is the M6ro, a bold promontory, or headland, whose front presents a white appearance, the effect of the dried excrements of myriads of birds that nestle there, among which the condor\* is occasionally seen; the base of the M6ro is washed by the surf of the Pacific. At Arica, the seabreeze blows almost constantly from the south-west. The M6ro is on the south side of the town, and consequently the effluvia from it is wafted over the site of Arica; therefore we might expect, that if the insalubrity of the place originates in the M6ro, as some have supposed, the town must be most sickly at the time when the southerly winds most prevail, and *vice versa*; but the reverse is the fact.

Arica, like all other places similarly situated that I have seen, is most unhealthy at the season when vegetation has come to maturity, and when moisture is most abundant.

The first chain or Cordillera of the Andes, is distant from the coast of Peru, at the part now under consideration, about 20 leagues, and, strange though it may seem to some who have not witnessed the phenomenon, the space of about 60 miles is all that separates winter from summer. The hot months of November and the two following are designated the summer months, by the people who live on the coast; while the same period is called winter by the inhabitants who reside across the mountains; and not without reason, for almost every day after meridian a tempest of thunder and lightning, accompanied with rain, hail, or snow, which generally continues till sunset, interrupts the business of life in the Cordillera, and causes the quebradas or ravines on the mountains

\* In September, 1826, Captain W. G. C. Kent, R.N. shot a condor, near to the M6ro of Arica. That gentleman had it conveyed on board a vessel in the bay, and wished to have it preserved, but owing to particular circumstances it was thrown overboard. I measured it, and when the wings were held asunder the length from tip to tip was sixteen feet. This condor was larger than some that are to be seen there, but much less than one with which I had an encounter, one morning before sunrise, on the summit of the M6ro of Arica.

to convey a flood to the arid plains below; which flood in some places reaches the sea, but in most cases is lost in the desert.

Arica is one of the places that are affected by the water from these mountains, and it is experienced that intermittent fever and dysentery most prevail at that season, when, owing to the heat and a greater supply of water, vegetation is most exuberant, and in the state of putrefactive fermentation. The water from the Andes reaches the coast in greatest quantity during the months of February and March, because, in these months, the heat of the sun is most effective in melting the snow in the early part of the day; so that at this time, the rain which still falls after midday, combines with the melted snow and increases the flood below. Now, it is at this time of the year, when intermittent fevers and dysentery are most prevalent, in all the places before mentioned. Of late years, Arica has not been so unhealthy as it was formerly in winter and spring. In proof of this, I may notice, that about one hundred persons under my charge arrived at Arica in the month of July, and during a period of four months subsequent to that time, not one death occurred among them, and that too after they had been nearly five months at sea; but had the same individuals been resident in Arica the four following months, the result would have been very different. Now, however, even at the worst season of the year, Arica is not so unhealthy as it once was. The emancipation of the country from the thralldom of Spain, has operated beneficially. In former times, the water from the mountains was allowed to find its way to the sea, by running along the almost level ground in the vicinity of Arica. The consequence was the formation of a swamp, whence exhalations rose, bearing disease, misery and death to the victims of resistless arbitrary power. When the patriots first got possession of Arica, they cut a considerable ditch, or channel, on the north side of the town, to let the water have free course into the sea. The place was greatly improved, and rendered much more salubrious during the interval of time that elapsed, between the period when the above-mentioned improvement was effected, and the re-occupation of Arica by the Spanish loyalists, who, with diabolical ingenuity and perseverance, filled up, or otherwise destroyed the canal, and again Arica became, what it had been for centuries before, very unhealthy. The accumulation of putrid animal matter, which operates so injuriously in some of our towns is not known there, and cannot influence the state of health. The police establishment of Arica costs nothing, and yet the scavengers of that place are a very numerous and effective body, for no sooner is any offal, or nuisance of an animal nature exhibited, than some of these functionaries pounce on it, turn it into food, and thus prevent decomposition from being

effected through the medium of atmospheric heat and moisture. So convinced are the people of Arica of the beneficial services of the gallinass, the black vulture of Linnæus, that a heavy mulct is exacted from whoever is so cruel or so inconsiderate as to deprive one of these birds of life. It is not improbable, that, after a short period shall have elapsed, the town of Arica will be removed to a short distance from its present site, which is a bad one; for the traveller who enters it towards evening during autumn, when at a short distance, has his olfactory nerves powerfully affected by a most loathsome stench, worse than that of animal matter while undergoing the putrefactive fermentation; a dense white cloud, or haze, at the same time, almost obscures the place from his view, and if he knows the cause of the phenomenon, it is apt to excite in his mind, emotions of a melancholy kind.\*

It has been observed, that people who are resident in that part of Arica which is most elevated, are not so subject to sickness as those who reside in the lower portion of the town. I believe this will be found invariably the case, wherever miasmatic influence exists. Earthquakes are of very frequent occurrence at Arica, but they are generally slight; houses are not often thrown down there, as they are erected in such a manner as to withstand shocks, which would have the effect of involving in ruins elegant and stately buildings, such as are to be seen in Glasgow. I have noted that there is always an increase of sickness subsequent to a smart shock of an earthquake.

I will not here advert to the symptoms and treatment of ague. To persons who visit these remote regions for commercial purposes, and whose residence is to be but transient, it is of most importance to know, that disease of the kind alluded to, may, in great measure, be prevented, by attending to the following simple rules. Keep within doors in the morning until at least one hour after sunrise, and also during two hours subsequent to the setting of that luminary; maintain, if possible, the moderate action of the cutaneous vessels, together with that of the biliary system, and nothing that I know is so effectual in keeping the skin in a healthy condition there, as bathing in the sea every morning for a minute or two, say at eight o'clock. And as a further prophylactic

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\* I anticipate that Arica is destined to become a place of great commercial importance—that a direct trade will ere long be established between it and the eastern world—that the tin of Oruro, the silver of Potosi, and the copper of Coquimbo, will be carried in vessels of the country to China, and exchanged for the commodities that are at present obtained through the medium of capital and shipping, belonging to the United States of North America.

against Intermittent fever, I heartily coincide with the late Bishop of Arequipa, who, when asked what he could recommend to prevent terciana, replied, "good bread, good beef, and good wine."

Before leaving Arica, it may not be amiss to notice, that immediately south from the Móra, about a mile from the town, there is an ancient burial place of the Peruvians, said not to have been used by them since the time when the Spaniards first came to that part of the world, where bodies which were interred more than three hundred years ago, are, in some cases, found entire. I examined a number of these relics of former ages, and found that the phosphate of lime is all that remains of the bones, which makes it difficult to remove them without breaking. Some have the hair on the head entire, and, in some instances, even the features can be distinguished. The place has been much frequented of late years, and the ground broken up since foreigners have had access to it. While I was at Arica, a gentleman belonging to H. M. ship *Blanche*, succeeded, after much trouble, in getting one of these natural mummies taken on board the frigate, and I have heard that it is now in the museum of the University of Cambridge. Some persons have lately destroyed a great number of these curiosities by digging about them, expecting to find treasure. I never saw any thing taken out, except some of the earthen vessels, which the ancient Peruvians seem to have been accustomed to put into the ground with their dead. The soil consists of sand and nitre, which, with a total absence of moisture, added to a hot and dry atmosphere, has had the effect of drying or extracting the fluids, and thus preventing the establishment of putrefactive fermentation.

Leaving Arica on the route to Tacna, the traveller proceeds in a northeastern direction, having the ocean on his left, and towards the right the famed valley of Sapo. About a mile north of Arica, it is necessary to pass the river San Joseph, and five miles further on is the river of Chaque Luta, which is only a brook during the colder months, when the frost is excessive on the mountains, but, in the hot seasons, and when the rains have fallen among the Andes, is often dangerous to travellers, lives having been lost in it. In February, 1827, the writer, while on a professional visit to Arica, was nearly drowned here, the animal on which he rode having been baffled in its first attempt to get across. On the following day, several military recruits were said to be lost at the same place. They were on foot, and tied one to another to prevent desertion, and, being overcome by the impetuosity of the torrent, were swept away and perished together.

The next thirty-six miles present a perfect waste, where there is not a blade of vegetation, nor a drop of water; at some places

a peculiar hollow sound is produced by the feet of the horse or mule. On arriving at the *Equesta*, a height distant six miles from Tacna, this town is seen for the first time, and is a welcome spectacle to the exhausted traveller, who now can direct his eye from the pathless sand of the desert to the houses and evergreens of Tacna, appearing like an islet amid the immense solitude—another *Tadmore* in the wilderness.

Tacna is an Indian town of some antiquity, situated about midway between the base of the *Cordillera* and the sea. The desert here presents an inclined plane to the eye of an observer, the town being fourteen hundred feet above the Pacific. The place is supplied with water for all purposes by a river, which issues from the *Andes* by the great gorge, or ravine of *Palca*, the principal pass across the western *Cordillera* from *Arica* to *Bolivia*, or *Upper Peru*. It is obvious that, in such a place, water from the river is indispensable to the people in the valley, and must be highly valued. Accordingly, the water is apportioned to the proprietors, or holders of the *chaqueries* or plantations, with strictness and punctuality, by persons who are appointed for that purpose. The course of the river is changed every other day, so that irrigation may be effected more completely. Except in the event of an extraordinary flood, no portion of the water of this river reaches the sea. The irrigation of the *chaqueries* in the valley takes so much of the stream, that the remainder is either evaporated or absorbed by the desert.

The productions of Tacna are a great variety of culinary vegetables, with a little maize and lucern, the principal food of horses, mules, and donkeys. Melons, pomegranates, peaches, and other fruits, are to be had in abundance. The olive, the fig tree, and the vine also flourish here. A great part of the vegetable productions of the place not being consumed by the people, is allowed to decompose, and miasmata, with their usual concomitants, follow. The climate of Tacna is delightful, the thermometer ranging between 70° and 90° in the shade, during the greater part of the year. The proximity of the *Andes* is the cause of this moderate heat. The mountain of *Tarcora* is situated immediately east of the valley of Tacna; the summit is a cone covered with everlasting snow, and elevated nearly nineteen thousand feet above the level of the ocean.

Intermittent fever is met with in Tacna at all times, but more in some seasons than others; it is generally most prevalent during autumn. The tertian form is most frequently experienced. I have seen some very old and obstinate cases of quartan ague, but, in every such case, I learnt, on inquiry, that the patients had been exposed to other miasmata than those of Tacna. Of several hundred cases of intermittent fever which came under my observation at this place, none exhibited

the quartan type of the disease except a few, the subjects of which had been exposed to the miasms of other districts. However, it does not follow as a necessary result, that the miasms of Tacna cannot produce quartan ague. *Pujos de sangre* (dysentery) is often met with here, as in all other places which I visited on this coast. In many cases, it was ascertained to be symptomatic of an affection of the hepatic system, in others it was idiopathic.

The province of *Arica* includes an extent of territory greater than one half of Scotland, and, in the year 1828, the population amounted to fourteen thousand, of which number five thousand reside in the valley of Tacna.

It is a singular fact, that earthquakes are neither so frequent here as at *Arica*, nor are they so severe when they do occur. The great earthquake of the 30th March, 1828, which almost laid the city of *Lima* in ruins, was felt at Tacna, but in a slight degree only.\*

*Samo* and *Loqumbo* are two narrow straths or valleys, separated from Tacna, and from one another by a desert of about thirty miles. At both places there is water from the *Andes*, vegetation, and miasms, with their usual concomitants, but not meriting further notice, the population being scanty, amounting to a few hundreds only.

A few hours after leaving *Loqumbo*, by the lower route to *Moquegua*, the traveller, while he is advancing over an extensive flat, all at once sees an immense break, or chasm, in the ground before him. When at the edge of the precipice, it is found to shelve down abruptly, both sides being perpendicular to the horizon, and extending longitudinally in both directions, farther than the eye can reach.

A stranger, about to cross for the first time, is apt to fear that further progress on his journey is impossible; but, following the example of the guide, he throws the reins on the neck of his mule, which soon commences making its way downwards. Putting one foot circumspectly before the other, to ascertain that the ground is firm, the animal gets to the bottom, by a sort of stair or declivity, which runs slanting along the front of the precipice. All the rider has to do is to keep his seat, reclining well back in the saddle; if he wish to get down by himself he must dismount before the mule begins to descend, because, if he attempt to do so while the animal is on the stair, which is narrow, it may be thrown off its balance, and then both must make a somersets to the bottom. The ascent on the opposite side is effected with some difficulty, and after riding the distance of a musket shot another gap appears in view, to the no small mortification of a stranger. This break presents the same general phenomena,

\* The city of *Arica* was totally destroyed by an earthquake on the 8th of October, 1831.

but is not quite so deep, though of greater breadth, and equally well-sided as the one already noticed, and has to be crossed in a similar manner. Some mighty convulsions of nature must have been the agent by which these immense cavities have been produced.

A few leagues in advance towards Moquegua, the route lies over the tops of mountains, some of which seem to be of volcanic formation; and then the varied and magnificent scenery of the valley of Moquegua bursts on the sight, and, if seen when illumined by the rays of the setting sun, the prospect is picturesque in the extreme.

The city of Moquegua is the capital of the province, and is situated in the valley of the same name. It is distant from Arequipa about fifty leagues, and in 1828 the population of the town was 10,000. The vale of Moquegua has long been celebrated for the fertility of its soil, the industry of its inhabitants, and the deadly nature of its climate. The river which flows through it is the only water, for irrigation and all other purposes. The vine, the sugar-cane, and other tropical productions are very abundant. Aguardiente (brandy) is made in great quantity. Sugar is also manufactured here.

Formerly one million of dollars was received annually by the people of this place for wine and spirits, sent chiefly to the mining districts. The trade is still considerable.

The town is built in a hollow or pit; so singularly is it situated, relatively to the approach to it from the south, that the traveller looks down on it without any previous intimation of its being so near. The site seems to be the very worst that could have been chosen in the valley, in so far as salubrity is concerned.

The Spaniards were very unfortunate in their choice of sites for some of their towns in the New World; either from ignorance, or motives not now ascertainable, they frequently fixed on spots which are very unhealthy, and more so than others in the immediate vicinity. Moquegua is a case in point. According to a tradition, the original Spanish inhabitants held a meeting, for the purpose of fixing on a place for the establishment of the intended city. The major part of the people present were very desirous to have the town built on a spot nearer the mountains, which is much more salubrious; but a few influential individuals overruled the general wish, and insisted on the erection of the city on its present site, which is truly pestiferous.

Intermittent fever, in all its varieties, is seen here, and also dysentery. The sickly aspect of the people in general, is sufficient proof to a stranger of the insalubrity of the place, without the evidence that may be derived from seeing the hundreds of sick persons, who, in some seasons, are rendered unfit for locomotion by the poison of miasmata, which here has a numerous population for its victims.

Persons going from Moquegua to Arequipa,

have the choice of two routes, that by Tambo, or that by Los Pueblos. By the latter route, it is necessary to ascend as far as the line of the Cordillera. This journey is not so dangerous to health, as that by the valley of Tambo, but is more fatiguing, and rather longer. The writer having heard much of the notoriously pestiferous valley above mentioned, it was determined to reach Arequipa by that way.

The distance from Moquegua to Arequipa by Tambo, is one hundred and fifty English miles, and the only halting place between the two cities, where food for cattle can be procured, is in the aforesaid valley. On arriving at the Moró of Moquegua, which is a height overlooking the sea, and about midway between the latter place and Tambo, the night was passed in the open air, and without water. There is a small spring of excellent water, nearly on a level with the sea, but the descent to it being difficult, and very fatiguing, the guides kept its existence a secret, and on the following morning, grapes, which we had carried from Moquegua, were used as a substitute for water. From this place the continent bends, the coast taking a northwesterly direction; and the tract towards Tambo leaving the coast, a considerable elevation has to be attained. When within a league of the valley the ground begins to fall gradually, a narrow pass leading to that part where it is necessary to cross the river.

The sun had set before our arrival at the place, where halting for the night was indispensable, and the mules having been two days and a night without water, first rushed into the river to quench their thirst, and were afterwards turned into a small patch of alfalfa (lucern).

Tambo is much dreaded by travellers, especially at this season, (February,) both on account of the river, to cross which is often extremely hazardous, and also the notoriously pestiferous climate of the valley. What first strikes a stranger is the smell, similar to that experienced at most places where vegetable matter is being decomposed by putrefaction.

The next fact worthy of notice is, that at this part of the valley of Tambo, there is no marsh, but there are several cuts or canals from the river, for the conveyance of water to the sugar plantations in the vicinity. The soil, at the place where we halted, seems to be composed of decayed vegetable matter, the accumulation of ages. A dense fog hung over us, and the mosquitoes were very troublesome.

This place is encompassed on all sides by mountains, and it is probable that the miasms are in a state of greater condensation, and the poison more concentrated here than at other places, where, though the remote cause of ague exists, yet people may visit them with greater impunity, than they can cross the valley of Tambo.

Three or four families of Indians make up



the population. An Alcalde or Magistrate, resides in one of the ranchas or wigwams. He is a pot-bellied Indian, and presents that bloated appearance sometimes seen where intermittent fever abounds.

Sugar in considerable quantity is made in this valley; the plantations are lower down nearer the sea than this spot.

It is worthy of notice, that in this country, wherever sugar grows, there fever prevails to a greater extent; and according to the statement of those resident at such places, the disease is more fatal, than where sugar is not produced. In the language of these people, "muy mortal es la Terciana de Tambo." This may arise either from something more deleterious in the miasms of places where sugar grows, or from the people employed in its cultivation being more exposed to the poison.

Whatever is the cause, an attack of intermittent fever, is, in most cases, the result of merely crossing this valley. Our party consisted of eight men, all of whom, except the writer, were natives of Peru. They slept on the ground during the night, partially sheltered from the open air, and seven of the party were attacked by the fever, at various dates from the period of their exposure to the miasms of Tambo. The time that elapsed before the symptoms of the disease were developed, varied in different individuals, from three days to three weeks. The writer was not taken ill until the day subsequent to that of his arrival at Tacna, on his return from Arequipa. It is observed, that those who have not previously suffered from ague, are seldom attacked while *travelling* in these countries, though exposed to the exciting cause.

The disease does not appear until after the completion of the journey, when the excitement concomitant on travelling has subsided. This was the case with the writer, who, though he had been much exposed to miasmata in Brazil, Bolivia, and Peru, yet was not affected with ague, until after his visit to Tambo.

Persons who are attacked with ague while on the road, are generally found to have been previously subjected to the disease. It is always peculiarly distressing in such cases, in consequence of the impossibility of giving the sufferer that aid, which, in more favourable circumstances, humanity would dictate. Sometimes the patient no sooner sees his finger nails become blue, or touching his nose with the back of his hand, and finding it cold, than, knowing what is coming, he slips from his mule, and prostrates himself on the earth. On the approach of the shivering fit, he gives vent to his feelings in murmurings, or uttering imprecations on his hard fate, he implores assistance from those around him. When, owing to the severity of the paroxysms, the sufferer no longer can speak, he may be seen beating the ground with his

heels, moving them alternately with rapidity. This last mode of exercise may seem somewhat odd to the unscientific; but, in such circumstances, it is not a bad expedient, for maintaining the circulation in the inferior extremities, which, as is well known, is a desideratum during the cold stage of intermittent fever.

The river at Tambo emerges from between the hills, where, during floods, it is straitened in its channel. It is now more expanded and divided into several branches, which, at this season, are of sufficient magnitude to excite apprehension in those who attempt to gain the opposite bank.

Application was made to his sallow Worship, the Alcalde before noticed, and half a dozen tall Samboses were procured, who, for one dollar each, swam, or waded into the river, and stationed themselves at different points of the ford across the stream, in the several limbs of the river in succession. They served the double purpose of pointing out the most eligible tract, and also, in the event of an accident, were ready to give assistance. These people are excellent swimmers, and are able to stand up to the neck in water and stem a current, which a mule is often unable to withstand. In this way, the river of Tambo was crossed at four in the afternoon. The moon being full, it was found expedient to travel all night. The heat, during the day, at this time of the year, is overcoming, especially while ascending the celebrated defile, or Quebrada de Celsipedes, a journey of sixty miles up hill, and in the whole of which neither water, vegetation, nor any living thing is seen.

This Quebrada is an extraordinary phenomenon, even in this extraordinary country. The ground rises by a gentle ascent from the Arequipa margin of the river, and, when distant from it about four hundred yards, the traveller finds himself on a height, down which is the way leading into an extensive natural basin, which is contracted at its further extremity into a passage fifty or sixty yards in width. The sides are hills of a dark coloured sand, the ground is of the same, at some places firm, at others so deep as to cover the fetlock of the animals. The breadth of the Quebrada varies frequently, being in some places contracted to twenty paces, at other parts it is five times that width. The ground rises gradually, and at the outlet next Arequipa, which is the highest point, the elevation is 9,000 feet above the sea. The length of the Quebrada is twenty-one leagues, and throughout the extent of twenty leagues from the river of Tambo there is no way of escape, except by the two extremities.

The traveller, during this journey of sixty miles, sees nothing which has the principle of life, except his fellow-travellers, and the animal on which he rides. Neither beast, bird, reptile, nor insect is to be met with; not even a sound is heard, except that of the

occasional snorting of the mules, the voice of the muleteer encouraging the animals, or the roll of distant thunder. Hundreds of skeletons of horses, mules, and asses, are the only mementos of animated nature found in this valley of death. Birds of prey, though not seen nor heard by the traveller, must visit the Quebrada, as the carcass of any poor animal which is so unfortunate as to fall a victim to the privations incident to the journey is soon devoured.

The Quebrada is very tortuous. At the height of about 7,000 feet a little water issues from the middle of the road. This water is salt, and is a source of great disappointment to the parched and almost worn out animals, who eagerly draw in the inviting, but deceitful, draught.

A few leagues more bring the traveller to the cabin of an Indian family, where there is a spring of fresh water, and one league further on is the extremity of the Quebrada. We arrived there at nine o'clock A.M., the morning was fine, and the sky cloudless. The scene presented to the observation of those who are alive to such objects is truly grand. The river Chile, after contributing to the fertility of the country around Arequipa, rolls its impetuous course 2,000 feet below the outlet of the Quebrada. Beyond the river are innumerable chaqueries (gardens), amid which the cemetery of the city appears conspicuous, interspersed with shrubbery, and pillars painted white. Further off, on an inclined plane, the city is seen to great advantage; being remarkable for the extent and solidity of many of its edifices, both public and private. It is also interspersed with trees and shrubs, which, contrasted with the whitened aspect of its buildings, more particularly the convents and churches, with their towers, under the rays of a tropical sun, presented a novel spectacle. Beyond all, at the distance of a few miles from the city, the mountains of the western Cordillera of the Andes rise like an enormous rampart shrouded in eternal snow. Immediately behind the city the volcanic towers rise to the height of 17,000 feet above the ocean, its arid summit unlike the snow-capped peaks of the Andes in its immediate vicinity.

The valley of Arequipa includes an immense space, extending towards the north of the city, further than can be seen by a spectator, when placed at the outlet of the Quebrada. This valley is bounded on the east by the Andes, and towards the west by hills of inferior altitude. It is partially under cultivation, more especially that part of it in the vicinity of the city. A river is being brought from the Andes, for the purpose of rendering fit for cultivation the northern portion of the valley, which is at present barren from a want of moisture. This great work has been carried on during the last six years; the expense is defrayed by a joint stock com-

pany, consisting chiefly of natives of the country.

The city of Arequipa is erected on the southern part of the above-mentioned valley. Its population was said to be 60,000, but I have reason to think that 40,000 is nearer the number. The great square, where the public market is held, is 7,500 feet above the ocean. The ground rises gradually towards the foot of the volcano, which, at the height of about 1,500 above the plaza, or square, springs upwards in one stupendous column to the height of 8,000 feet, the summit being 17,000 feet above the sea. This volcano is allowed to be the most perfect specimen of a natural cone yet discovered on the earth. Its sides are covered by a dark coloured sand, which, towards the higher region, being loose and deep, is very annoying to those who attempt the ascent, a feat hitherto only twice performed. I expected to have been able to reach the top, along with U. Passmore, Esq., his Majesty's Consul in Arequipa—a gentleman who, during his residence at that important station, has been distinguished not less by an assiduous attention to the more immediate duties of the Consulate, than by a polite attention to strangers, and devotion to the interests of science. Through the influence of Mr. Passmore, the mules and Indians necessary for the ascent of the volcano were provided by the Prefect, General la Fuente; but circumstances, over which there was no control, prevented it.

Dysentery is the prevailing disease in Arequipa. In some seasons its ravages are terrible. The number of persons affected is very great; and, according to report, the ratio of mortality is much more than is witnessed by those who inhabit more temperate climes. Almost every stranger who visits this place is, shortly after his arrival, affected more or less with an attack of diarrhœa, which, if not immediately attended to, commonly ends in an inveterate attack of dysentery, with great discharge of blood, and excessive tormina. If the patient be not speedily cut off, the disease is apt to assume a chronic form, and, in many cases, is followed by intermittent fever.

Various causes have been assigned for the prevalence of dysentery in Arequipa. Its latitude is about 16 degrees south. The days are generally very hot, and the nights always cold. The town is distant from the sea 90 miles. During the day time, no seabreeze moderates the heat; but, every evening, a strong current of cold air rushes down from the snow-covered mountains in the vicinity of the city. During winter and spring, the cold at night is very severe. The houses here are more substantially built than in most other places, whether in the old or the new world. This is necessary, to enable them to stand against the earthquakes, which, though not of such frequent occurrence as on the coast, yet have five times destroyed the city. For this reason, no wheeled carriages are al-

lowed to be used within the city, because the sound of them on paved streets, as heard by people when within doors, is not dissimilar to the portentous rumbling noise which is often heard immediately before a severe earthquake. In these countries, it is the custom for people to run from the house to the street on the first appearance of an earthquake. The houses here are generally well built, of grey granite, and the roofs arched with the same, but the windows are not glazed, and the inmates are exposed to the great and sudden change of temperature experienced after sunset. The comfort of a fire is not known as in Britain, culinary operations being generally performed in an out-house. Thus, it is obvious that in such a place the functions of the cuticular and biliary systems are very much exposed to derangement.

The city, though standing on a declivity, and during a part of the year washed by torrents of rain, is not kept so clean as it should be, nor are those precautions used which would be enforced by an efficient medical police. The plaza mayor, or great square, is the place where the principal market is held every lawful day. Here an immense quantity of vegetables is exposed for sale; and the refuse of these, as also other matters, is permitted to accumulate and emit exhalations. The rain which falls during the hotter months is the only means by which the town is cleansed. The streets are intersected, as are those of most Spanish towns, by a single ditch, or canal, and these canals are not kept clean. While a current of water is passing through them, all is well; but when that is not the case, they are so many sources of malaria.

There is reason for believing, that by means of the exertions of a well regulated police, the city of Arequipa might be made much more salubrious.

Intermittent fever is more fatal in Arequipa than is generally the case in that disease; for according to the experience of the writer, ague was very seldom attended with fatal consequences, if the disease were checked early; and that in most cases is easily done, by means to be shortly adverted to.

Intermittent fever is to be seen at other places, not less elevated than Arequipa. I saw persons suffering under ague on the banks of the Pilcomyio, near its source, and also in the valley of the Cachymio, at that part where it is commonly crossed on the journey from Potosi to the city of Chuquisaca. When traversing the profound valley of the Pilcomyio, near to the remains of the celebrated bridge of the Incas, I visited a small community of the aborigines of the country, and found that both there, and also in the valley of the Cachymio, ague is endemic. Both these rivers originate among the mountains of the eastern, or great internal Cordillera of the Andes of southern Peru. The Pilcomyio, at the place above referred to, runs with considerable velocity along the eastern slope of

these Alpine regions, and is elevated 8,000 feet above the level of the sea. It should no longer be a question whether ague can be endemic in the vicinity of running water.

Intermittent fever, and also dysentery, are very prevalent on the banks of the Tipuani, at that part which is so justly celebrated for the gold found in its channel. This is in the province of Larecaja. The river runs along the eastern slope of the eastern Andes, and ultimately joins the great river Amazon. The gold washings are situated 400 miles from the coast of the Pacific Ocean. The road from the Pacific to the Tipuani is one of the worst in the world; ninety miles must be clambered on foot, over precipices and frightful ravines, which even a mule cannot pass. Fever and dysentery make sad havoc in this region, notwithstanding its elevation.

I believe that wherever vegetable matter is decomposed by atmospheric agency, there miasmata exist, which, if in sufficient quantity, excite intermittent fever in subjects who are predisposed for the reception of the poison.

In so far as my observation extends, miasms do not exist on that immense plane, or table land, which lies between the western and eastern Andes of Bolivia; but what is called ephemeral ague may be seen. I have witnessed ephemeral ague in the cities of Oruro, Potosi, and Chuquisaca (la Plata). The former city is elevated 12,400 feet above the sea. The house where I lodged in Potosi, (Achavel's,) in la Calle de Comercio, is 13,500 feet above the Pacific, and in it I have seen severe ague. But intermittent fever is not endemic in such places, because there the climate is such as to prevent the formation of miasmata. In these situations, the disease appears in the persons of those only who have been at other places exposed to their action, and have previously suffered from intermittent fever. These fits of ephemeral ague are generally induced by bursts of anger, error in diet, or in fine by whatever has the effect of diminishing the energy of the nervous system.

I am of opinion that the intermittent fever of the south-west coast of America is an affection of the nervous system—is a disease of direct debility, originating in the poison of vegetable miasms. It seems to operate more especially on the subjects who are predisposed to exhaustion, fatigue in travelling, defective nutrition, the depressing passions, error in diet, or intemperance generally. The disease is most apt to appear among those who travel along the coasts of these regions. The endurance of excessive fatigue and privation, from deficient nourishment, want of good water, sleeping on the ground, and other annoying circumstances, predisposes the system for the reception of the poison, which, unfortunately, is to be met with at the only places where travellers can, in most cases, halt during the night.

Troops are peculiarly exposed to ague and

dysentery in these countries. They are obliged to travel on foot, often during the day, under a tropical sun, carrying arms, and sometimes baggage, and the commissariat department is not as it should be, which circumstances, combined with the fact that in most cases the soldiers have been torn from home and kindred, in a forcible manner, and without previous notice, produce the most dismal effects, especially among recruits.

Europeans, on their arrival from Europe, are not so liable to be attacked by intermittent fever as they are after a residence of some time in this country. Before the poison can take effect, it seems necessary that a debilitating process must have been going on—that the energy of the system must be reduced—and then the effects of the poison of miasmata are developed.

Ague is seldom met with among the crews of the vessels of war of various nations that now frequent the coast of Peru. Were the poison of miasmata susceptible of being conveyed by wind to even a fraction of the distance mentioned by a late writer on malaria, we should witness its effects on board the ships that come to anchor in the roadstead of Arica, where they, in some cases remain during months, within one mile of the land.

However, it is but fair to remark, that perhaps the want of sufficient moisture in the air is the reason why the miasmata on this coast are not more transportable by the land-breeze. In the treatment of the intermittent fever of these regions, I would recommend the following mixture, which, in several hundred cases of ague, I have found to be what some people would call a specific; but I do not like the term specific when applied to medicine of any kind.

Take of the sulphate of quinine one drachm; muriate of ammonia twenty grains; concentrated essence of ginger half a drachm; pure water thirty ounces. Any adult suffering under ague should take of the above mixture a wine-glassful, or two ounces, every half hour, commencing two hours before the time when the cold fit is expected. Of course it is recommended that four doses of the medicine should be taken.

If the essence of ginger is not to be had, a drachm of the powder of the same should be used in its stead. If the ammonia cannot be procured, then, in that case, acidum sulphuricum may be added to the water and quinine, in the proportion of a drop of the acid of the shops to every grain of quinine, which makes a super-sulphate, which is more soluble in water.

If quinine cannot be had, a tincture of the red table bark ought to be used, putting one ounce of the bark (well bruised) to two ounces of brandy, or other spirit, as may be convenient. One ounce of this tincture,

along with two ounces of water, should be taken as above advised.

It is necessary to be particularly attentive to the state of the biliary system and alimentary canal. Where functional derangement of the hepatic system exists, the blue pill is often beneficial; but if there is an organic affection, mercury is worse than useless. Mercury cannot cure ague, but, in some cases, it seems to have the effect of assisting the operation of other medicines. It would be out of place to enter here at length into the treatment of ague. The writer never gave arsenic; the disease, when not complicated, gave way to more safe modes of cure. In some cases, cinchona in any form could not be made to remain on the stomach; in some such cases, very strong doses of a hot preparation of ground coffee effected a cure. Coffee of most excellent quality grows in the province of La Paz. The coffee should not be boiled, as that process has the effect of depriving it of the aroma. Four ounces of coffee, and *fbj.* water was the strength of the liquid given. It was taken as hot as the patient could swallow it, *without* sugar and milk, before the accession of the cold fit. In all these countries milk in any form is allowed to be extremely injurious to persons suffering from ague, and should never be administered.

In some cases of quartan ague, a combination of the sulphate of quinine, with infusion of quassia, seemed to be more effective than the former alone, which might be a result of its adulteration, which has been done to a great extent by some unprincipled persons, the temptation being great a few years ago. Bleeding in the cold stage of ague, has not come under the writer's observation. He would be cautious in having recourse to that operation in those countries, especially among the natives on the coast. These people are generally of a weakly habit of body, and endure blood-letting very ill; besides, they entertain notions inimical to the abstraction of blood for any medical purpose. "La sangre es la vida;" "the blood is the life," is a common saying among them.

The writer did not find it necessary to use the lancet, except in a few cases, during the hot stage only. The subjects of these cases were chiefly Europeans, to whom there was danger from cerebral congestion; in such, the abstraction of more or less blood, according to circumstances, proved decidedly useful.

Where sulphate of quinine is not procurable, an infusion of cinchona, with carbonate of potass, is an excellent remedy for ague. The people in Peru are prejudiced against the bark in the form of powder, and not without reason; for what is imported from Europe is often adulterated, and what is made in Peru is so often imperfectly pulverized as to render it unfit for the purpose for which it is administered.

Emetics, opium, and mental emotion sud-

denly induced, sometimes have the effect of warding off a fit of ague, but these do not cure the disease.

Tartar emetic should not be given. Extreme and continued nausea and retching are often the result of a dose, and we know that nausea is, in many cases, a most distressing symptom attending the first stage of the malady. Sulphas zinci, or ipecacuanha, are the best medicines for exciting the action of the stomach in ague.

I hold that opium should not be given in the ague of Peru, except before the cold fit, for the purpose of preventing it, and thus gaining time; therefore opium should be given in the form of tincture only, it being more prompt in action. If the fit come on after opium has been taken and retained, then the hot stage is generally more severe than if no opium had been taken, and in such a case, there is greater danger to the cerebral system.

I consider it worse than useless to give the cinchona in any form during the paroxysms of the disease. The grand object which ought to be kept in view, is to prevent the fits, cure the disease, and strengthen the system generally. The two former are, in most cases, happily accomplished by the same means, the antiseptic mixture before mentioned. The strength is best supported by means of such liquid nourishment, as chicken soup, or arrow root. It is a good general rule by which to adhere, in conducting the cure of the intermittent fever of those regions, not to allow the patient any solid food, but, if it is possible, *put an embargo on his teeth*, until he be completely convalescent.—*Glasgow Med. Journ.*

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THE

**London Medical & Surgical Journal.**

Saturday, Aug. 18, 1832.

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CHOLERA.

WE are happy to state, upon the best authority, that cholera is very much on the decline in Dublin, where it is chiefly confined to the poor. It is to be recollected, that diarrhœa and dysentery are usually prevalent at this season in Ireland, in consequence of the aliment of the working classes consisting principally of the potatoe in an immature condition.

In addition to this predisposing cause, there are want of employment, poverty, filth, inebriety, and the constitution of the weather. Our correspondents assure us, that there is no proof whatever of the contagiousness of cholera, and that, in its worst form, it defies all remedies. The exhausted air-bath, the saline medicines, have proved equally useless. A saturated solution of the chloride of sodium, with an ordinary quantity of the nitrate of potass, has arrested the vomiting and diarrhœa in a most remarkable manner in the Military Hospital, near the Phoenix Park. This plan of treatment is followed up by proper doses of calomel and rhubarb.

We are as much in the dark in regard to the pathology of the disease as ever. In some cases, the gastrointestinal mucous membrane was highly vascular, in others inflamed; in some the liver was congested, and again in many others it was remarkably pale, and the gall-bladder filled with a whitish fluid. This latter fact is of great importance, inasmuch as considerable stress has been laid on the circumstance, that the gall-bladder has been very frequently found full of viscid bile. Depletion has succeeded occasionally, but in other cases it appeared to hasten the approaches of death. It should seem, from the statements before us, that the pathology and treatment of cholera are involved in as much obscurity as ever.

There is a marvellous story current, most convincing to the true

lover of contagion. A red-hot contagionist, travelling from the North, heard at an inn on the road-side that a lady was suffering from an attack of cholera. Like a good Samaritan, he lent her his aid. Determined to trace it to the source from whence, in his almost solitary opinion, this disease springs, he cross-questioned the unfortunate invalid, as to whether she had had any communication with any infected person; to which she gave a most decided negative; she did not come from any district where the cholera was raging, neither could she in any way account for the attack. At length she remembered, (*mirabile dictu!*) that feeling very cold on the coach on which she had travelled, a fellow-passenger most kindly lent her his cloak. This led to further inquiry, and it was discovered, on circumstantial evidence, that the owner of the cloak was a physician who had just left one of the infected spots, and that he had occasionally visited his patients in the identical cloak! So that no doubt this part of his dress had become impregnated with the infection, and had, in a most marvellous manner, conveyed it to the lady.

*An risu teneatis?*

The only similar well-authenticated fact on record is that which occurred to that veracious and intelligent traveller, Baron Munchausen, whose narratives equal in truth and simplicity some of the best related of the cholera-believers, who surround the Board of Health. We will allow this sagacious historian to tell his

tale in his own words; he says, "A mad dog one day ran after me in a narrow street at St. Petersburg. Run who can, I thought; and to do this the better, I threw off my fur-cloak, and was safe within doors in an instant. I sent my servant for the cloak, and he put it in the wardrobe with my other clothes. The day after, I was amazed and frightened by Jack's bawling, 'For God's sake, Sir, your fur-cloak is mad!' I hastened up to him, and found almost all my clothes tossed about, and torn in pieces. The fellow was perfectly right in his apprehensions about the fur-cloak's madness. I saw him myself just then falling upon a fine full-dress suit, which he took and tossed in an unmerciful manner."

*Ne vaut-il pas autant?*

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ROYAL COLLEGE OF PHYSICIANS,  
DUBLIN.

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At a meeting of the Association of Fellows and Licentiates of the Royal College of Physicians in Dublin, held on Monday last, it was unanimously resolved, that the damages against Dr. Ryan (one of the members), lately given in the Court of Common Pleas in London, appeared to be excessive; that he had not exceeded the duty of an independent editor, in defending the profession, and that the faculty ought to assist him, by contributions, to defray the same. A subscription was commenced, the amount of which will be found in our last page.

## Reviews.

*The American Journal of the Medical Sciences, February, 1832.*

(Continued from page 53.)

THE fourth paper is a detail of "Cases of injuries of the head, treated at the Pennsylvania Hospital, by G. W. Norris, M.D. one of the resident physicians," which we consider of sufficient value to deserve extracting. We come next to some "Observations on the remedial powers of the *Cimicifuga Racemosa* in the treatment of Chorea, by Jesse Young, M.D. of Chester County, Penn. This plant is a common production of the woodlands, and is known by the familiar name of *black snake root*. The remedy was obtained from an old lady, who directed the powder to be used a teaspoonful three successive mornings, then omitted for three others, and thus to be given three mornings alternately, until it has been administered nine times. The doctor narrates about four cases, in which he considers that it proved effectual; its *modus operandi* is not known. The following remarks appear just:—

"The idea of the knowledge of its efficacy being derived from an *old woman*, should not, in my estimation, operate against the article so far as to prevent its having a fair trial. I believe the old lady was not a *professed doctor*; but if she were, the knowledge if it prove valuable is none the worse for coming from such a source. What physician has not, and does not, derive many ideas from old women, which are in reality, practically valuable? and it cannot but be acknowledged, that from such sources, and from mere accident, the knowledge of many of our most valuable remedies have been derived, which are now engrafted into, and form a part of the general stock of the science of our profession. If I know my own mind, I am not fond of, nor very prone to, quackery; and, although I freely confess this article was used without any knowledge whatever of its *modus operandi*, or without knowing what to expect of it, other than probably a cure, it did not disappoint the latter expectation; and I now feel sufficient confidence in it to try it again, if opportunity occurs, and to hope that others will do likewise. If this be quackery, and it be justifiable in any case, it may be so when

applied to the investigation of the properties of our indigenous vegetables; but it is not, else the therapeutic part of our profession has scarcely any other foundation to rest upon, than a grand system of empiricism; for the history of almost the whole *materia medica* shows, that from such sources have been derived our most valuable agents. The investigation of the medical properties of our vegetable substances, then, should rather be considered laudable, when directed with the view of enlarging the boundaries of our knowledge, and thus adding to our resources, than condemned, because forsooth, they may have been the suggestions of vulgar ignorance, or even of empirical experiments, rather than the recondite inquiries of professional erudition. But neither a priori reasoning, nor professional erudition, can ever direct us to the peculiar properties or effects of any of our vegetable productions; they can only become known from repeated trials, or experiments."

We have, as the sixth article—

*Observations on those Pathological states of the system generally designated Asthenia, Adynamia, Debility, Weakness, &c.* By E. GEDDINGS, M.D. Professor of Anatomy in the University of Maryland; one of the Surgeons to the Baltimore Infirmary, &c.

In this paper, which occupies the space of 34 pages, the doctor considers debility under three heads, namely, *direct, indirect, and metastatic*. We cannot enter into an analysis of this essay, from the length to which this review already extends, because we dread the castigating rod of some of our readers, for giving them too much American medicine. We accordingly hasten onwards to the next, being the seventh article in the Number, entitled,—

*Observations on the Bilious Remittent Fever, which prevailed in Burke County, Georgia, during the summer and fall of 1831.* By A. C. BALDWIN, M.D.

Our American brethren appear to have had latterly a *pretty considerable* number of fever cases to cope with; besides the essay of Dr. Heustis, with which we commenced, that of Dr. Williams, and the one now under notice, we find, at the close of the Number,

an article by the editors, on the influenza, with which we shall terminate the present notice. The fever, of which Dr. Baldwin is the historian, showed itself after the cessation, and during the evaporation of severe rains, and was exceedingly prevalent; in many places entire families were attacked.

"A chill, preceded by languor and lassitude, as is common in all febrile affections, and accompanied with an uneasiness in the head, generally gave the first notice of an attack. The duration of the cold stage was various. With some it was scarcely perceptible, and disappeared in a short time; with others, so great was the oppression, characteristic of the disease, that reaction was retarded in its appearance, and a chilly sensation, alternating with feverishness, continued during the day. Many complained of having had two and three chills in twenty-four hours; and some asserted that their chill had continued for several days. By opening a vein, a stop was put to these symptoms, the pulse, though before oppressed, became full, hard, and bounding, and the second stage commenced. The skin was sallow, and the eyes presented a similar appearance. All complained of a bitter taste in the mouth, and an intolerable thirst was universally present. The tongue was covered with a dark brown fur; and there was a sense of weight at the pit of the stomach, accompanied with nausea and occasional vomiting, the matter ejected consisting principally of green bile. Most persons complained of griping, and costiveness was a common attendant of the disorder. There was a violent pain in the head and back, and occasionally a pain in the region of the liver. The skin, generally speaking, was hot and dry. In a few cases copious sweats broke out without being productive of any apparent benefit, but on the contrary were of manifest injury. Bleeding at the nose occurred occasionally, and was always followed by an alleviation of the disease. Delirium was sometimes present, and some complained of troublesome dreams, though the mind in general was but little affected during the continuance of the fever. The remission usually took place in the morning, although the fever was in many instances as high in the morning as it was at any other period of the day. Among children convulsions were very common, and among them the disease proved more fatal than it did among adults. When neglected, or when the cure was entrusted to inefficient remedies, or when the sulphate of quinine was administered before the system had been properly reduced by evacuating remedies, an enlargement of the spleen, and frequently to an enormous size, was the inevitable consequence. Relapses were very common, and

were generally, and justly, attributed to too free an indulgence of the appetite, the desire for food being so great after a recovery, as to be almost unmanageable; and from this cause only, many suffered two or three attacks of fever before the commencement of cold weather."

The treatment consisted in bleeding, which required repetition as the season advanced, and purging with calomel and castor oil, or salts and senna, and occasionally blisters, the application of sinapisms, followed by quinine, which generally proved effectual.

"The use of the lancet, and the free exhibition of purgatives, though to be chiefly depended on, and successful in a majority of cases, did not in every instance produce the effect desired, and it became necessary to call in the aid of other remedies in the management of some of the more obstinate cases; and the well-known compound of nitre, tartar-emetic, and calomel, proved of essential service, by relaxing the skin, and changing the character of the secretions. Emetics, though promising much, did not appear to suit the disease, and the stimulating practice was death. Oplum in any form appeared always to be productive of injury, and in my practice was in all cases forbidden."

Let the reader contrast this with the statement of Dr. Heustis, regarding a fever which occurred about the same time, where he states that he has found opiates "amongst the most valuable remedies that can be employed." Doctors differ.

"*Influenza*.—The influenza from which we are at present suffering in this country, prevailed in China during January, 1830, and in Manilla in September of the same year. It preceded the cholera both in Russia and Poland, but we do not know the exact period at which it appeared in those countries; it prevailed in France during May and June last, in England during June and July, and about November began to prevail in this country. Mr. Lawson, surgeon of H. C. ship *Inglis*, states that in China the symptoms of the disease were, "pain in the head, more especially over the frontal sinus, cough, discharge from the nose, sense of rawness in the throat and chest (rather than severe pain) great prostration of strength, in some of the cases there was pain in the epigastrium, as well as across the loins; with severe aching pains in the limbs, pulse frequent, but generally soft. The febrile symptoms, in most cases, had entirely subsided on the third or fourth day, and the cough, in the majority of



instances, in about the space of a week from the commencement. There were however some exceptions, where a troublesome cough remained for two or three weeks.\*

Mr. George Bennet gives the following description of the disease as it occurred at Manilla. The commencement of an attack from this disease was with a general lassitude, followed by pains referable to the lumbar region, and in some cases with muscular pains over the whole body; an increased secretion of mucus in the nose, as also in the fauces and bronchiæ; intense headache, principally referable to the frontal sinuses; tongue white; eyes suffused with tears; skin hot; much thirst; a rawness of the throat; cough, particularly troublesome at night; in some cases a restriction across the chest was much felt; appetite impaired; bowels generally costive; quick pulse; and in those of very plethoric constitutions, (in whom the attacks are severer,) a very quick full pulse; flushed countenance. The symptoms varied in intensity in different persons; some having the fever and concomitants so high, with a flushed countenance, and a pulse so full, strong, and quick, as to have almost induced me to resort to venesection; other cases again assumed a very mild character, but in a very slight degree incapacitating the patient from pursuing his occupations. The patients were worse during the night than during the day, the accession of the fever and cough being much greater at that period. After the patients had in some degree recovered, a troublesome cough, attended in most cases with much expectoration remained, and in delicate constitutions may be apt to lay the foundation of pulmonary disease.

In Paris the disease is described as commencing with coryza, headache, lachrymation, and sneezing; dryness, pain, and tickling of the throat; difficulty of swallowing and cough, sometimes dry and at others accompanied with expectoration of clear or thick mucus. To this first series of symptoms a more or less marked derangement of the stomach and bowels was added. There was loss of appetite, and sometimes nausea and vomiting, but when vomiting occurred, it was generally after violent fits of coughing. There was also lassitude and feeling of soreness in the limbs, and more or less depression of spirits. There was often no fever; when it did exist, it was commonly continued, moderately intense, and terminated with abundant sweats. In some plethoric persons the cerebral symptoms, and those of pulmonary inflammation, were very intense. In one case the fever continued for four days, and in another the headache was extremely violent, and only relieved by the repeated applications of leeches. In a few cases there were abundant and obstinate hæmoptysis. Previously to the appearance of this epidemic in Paris, catarrhs

had become frequent; as the hot weather came on, the catarrhal state of the respiratory apparatus almost entirely disappeared, but vomiting and diarrhoea, which had been observed in a few of the patients who were affected with the influenza, became more frequent and violent; in many persons there was no vomiting, but only dysenteric symptoms; in others, a simple bilious flux. Finally, during the month of August, spasms of the limbs and body were joined in some patients to the symptoms just described, constituting sporadic cholera.†

In England the epidemic is stated to have commenced like a common cold, but the constitutional disturbance was much more considerable than the catarrhal symptoms seemed to account for. "Running at the nose and eyes," says the editor of the *London Medical Gazette*, "with racking pain over the brows, are the most frequent local affections, which, however, are often accompanied or succeeded by cough, and sometimes by nausea and an irritable state of the bowels. The feelings of languor, oppression, and discomfort, are always considerable, and sometimes very distressing; being occasionally attended with anxiety at the chest and tendency to faint. Some have severe muscular pains, of a rheumatic character, with tenderness of the integuments. The attacks generally last from two days to a week, passing off with perspiration, and, in the worst cases leaving the patients considerably reduced."

Dr. Burne says that the head is heavy and painful, and is jarred distressingly by the paroxysms of coughing, which give the sensation as if the head was splitting.

In this city the disease has usually come on with catarrhal symptoms, generally attended with intense head-ache and gastric derangement. Delirium has been by no means an uncommon attendant on the disease, and in some cases the prominent affection has been that of the head, and even occasionally it has been a fatal one. Great depression of spirits has been occasionally present. When the catarrhal symptoms have predominated, there has often been much pain in the side, with rheumatism of the intercostal muscles and sometimes of the loins and limbs. The cough has been usually dry at the commencement, and sometimes occurring in paroxysms; the efforts to cough cause great racking of the brain.

We have seen the disease commence with vomiting and purging, like cholera, followed by a catarrhal affection of the respiratory mucous membrane, and rheumatic pains in the chest and limbs. The tongue has been in almost all cases exceedingly loaded, but there has been little or no tenderness of the abdomen on pressure.

† *Gazette Medicale*, June 25th, 1831, and Sept. 10th, 1831.

*Medical Gazette*, July, 1831.

\* *Medical Gazette*, Vol. viii. p. 525.

In the treatment, venesection has been nearly always demanded, and sometimes it has been necessary to repeat it two or three times. After general bleeding, local depletion by cups along the dorsal and lumbar vertebrae, have been exceedingly useful in relieving oppression of the chest, when it was present, or the rheumatic affection of the limbs. Cups to the back of the neck and to the head, relieved the cerebral symptoms. Gum water, rice water, lemonade, and the like, for sole diet, and mild laxatives have, for the most part, completed the cure.

Treated upon these general principles, patients have nearly always speedily convalesced, and their recovery has been complete. Where, on the contrary, active depletion has been neglected at the commencement, the case has frequently terminated fatally; or engorgements of some of the viscera, particularly of the lungs, have taken place, and the foundation has been laid for incurable pulmonary disease.

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*Illustrations of the Surrey Zoological Gardens.* Drawn from nature on stone. By J. KEARNEY. London, A. Schloss. 1832. Part I.

A YOUNG institution and a young artist, each devoted to the promotion of one of the most interesting branches of human knowledge, present themselves before us with the most delightful associations. The very undertaking of such an enterprise as this, argued the necessary degree of genius and skill to accomplish it in the parties who assumed it, and the result, at least so far as this specimen goes, appears to us to prove that the promise thus given has been amply and indeed triumphantly fulfilled.

The present Number contains three plates; one of the Alpaca, the second of the Magot, the third of the Tiger. We are ourselves well acquainted with the originals, and we do not hesitate to say, that a more perfect representation of a living animal was never given by art than we find in each of these plates. Mr. Kearney seems to us to take a very original view of the nature of his duties; he does not contemplate his subject merely as an artist, but he looks upon it as a judicious physiologist,

who at once discerns the character which most distinguishes the animal delineated. If we consider the attitudes, and the diversified scenery in which the animals are presented to us by Mr. Kearney, we shall be struck with the great ingenuity shown by him in adhering to the principle just mentioned. Thus the Alpaca has a beautifully intelligent expression of the eyes; Mr. Kearney, therefore, with great propriety shows him looking wistfully at a flock moving in a distant valley; he is distinguished too by the great length of his woolly covering—Mr. Kearney places him in the erect attitude which displays, in the most obvious manner, this peculiar character. Again, the Magot, or Barbary ape, is made to exercise the prehensile power of his fore-feet, whilst some notion of his dental formula may be acquired as he grins a terrible defiance at his approaching companion. This is the perfection of art, or rather this is the quality which raises the artist from a mere mechanic into a highly intellectual philosopher, who thus renders that calling, which was hitherto merely subservient to the gratification of sense, a source of most useful and delightful intellectual improvement.

The reader will understand that this work is in lithograph; that it is executed with unusual delicacy and grace in that style of drawing; and that the letter-press descriptions are all drawn up in language at once scientific, popular, and elegant. Upon these descriptions we must be allowed to remark, that if much more than is here given of the personal history of each animal were furnished, it would make the work particularly attractive.

The price of the parts is about the same proportion as to value, with the well-known *Penny Magazine*; we are not surprised that, under circumstances, the work was immediately patronized by His Highness the Duke of Sussex.

*Rapport et Instruction Pratique sur le Cholera Morbus, rédigés et publiés d'après la demande du Gouvernement. Par l'Académie Royale de Médecine.*

*Report and Practical Instructions on the Cholera Morbus, drawn up and published at the desire of Government. By the Academy of Medicine.*

THE Royal Academy has published a second Report, containing the result of the practical information acquired by the Faculty during the prevalence of cholera in Paris. The Members of the Commission were Gueneau de Mussy, Biett, Husson, Chomel, Andral, Bouillaud, and Double. This document is an evidence of the industry and the careful attention of the great chartered body of medicine of Paris; and is a proof, if any were wanting, of the superiority of their establishment over our useless and unpopular College of Physicians.

It was about the 22d or 26th of March that the disease burst forth in the bosom of the capital. Previous to that period, some isolated facts, some doubtful cases, had been noticed in Paris, but neither the towns nor the villages, situated upon the frontiers of any infected state, had exhibited any signs of the epidemic.

The malady burst forth suddenly with great power, in a quarter less than all others in communication with strangers; far from the posts, the messageries, the streets, and the hotels at which people or merchandize arrive from the countries where the disease raged. It seized immediately the badly lodged, the ill clothed, the badly nourished classes, and those who were debilitated by excesses. It attacked sometimes simultaneously, at other times successively, individuals living in the same apartments and belonging to the same family. Although scientific men were more exposed to the epidemic influence, it does not appear that the physicians or the students were more attacked than the rest of the population; the

same may be said with regard to those whose duties brought them into contact with the sick, such as nurses, hospital assistants, the clergy, and the relations of the sufferers.

The attack of the disease was most sudden, very intense, and very destructive: soon afterwards it wore various aspects, occasionally with premonitory symptoms, sometimes without. The great majority of the population felt, in different degrees, the epidemic influence:—lassitude, sleeplessness, heaviness of the head, depression of spirits, loss of appetite, costiveness, deficiency of urine, were generally complained of, but not disease sufficient to prevent them following the ordinary occupations. The confirmed cholera presented different degrees of intensity, and commenced in various ways; in some cases, cephalalgia, more or less acute, cramps of the lower extremities; in others, occasionally, vomiting was the first symptom, but the most common was diarrhœa. These symptoms lasted occasionally some hours, at others some days; they were premonitory of the disease.

The causes of this malady have been attentively examined, but without furnishing us with any new facts, or adding in the slightest degree to the information we had previously received. Of the essential cause, the Academy of course declares itself incapable of speaking; it therefore confines itself to pointing out what are the causes which predispose, such as the action of the cold and humid air, particularly during the night; quick transitions from heat to cold; damp low situations; a residence overrun with domestic animals; fatigue, watchfulness; debilitating causes of any kind; excess: where these have existed, the disease has occurred, and, on the contrary, in the schools, the colleges, the religious houses, where quiet, temperance, cleanliness, and equanimity reigned, it has been unknown.

The remedies are then enumerated, but they are none of them of a deci-

sive character; there is nothing beyond what daily experience has shewn may occasionally be serviceable, but they are such as have no specific influence and afford no certain means of cure.

The preventive means recommended are strict attention to diet, and the moral habits. The Academy has also made some remarks on pretended preservatives, many of which, such as camphor, vinegar, &c. it considers to be injurious.

This little document, though it does not throw much light upon the subject, is not unworthy perusal; it shews how much the enlightened medical men of both countries agree upon the most essential points; and is a proof of the honest feeling in the profession, which makes them state that they have as yet attained no real practical knowledge, and that they will not delude the public by imposing upon its credulity.

#### CASE OF TIC DOULOUREUX.

By W. DOBSON, Esq., Pimlico.

MR. P. æt. 65, a tall plethoric man, had enjoyed uninterrupted good health until about nine years ago, when he was attacked with tic douloureux of the right side of the face. He attributed the accession of this malady to adverse domestic circumstances. The affection has gradually increased both in the intensity of the paroxysms and the frequency of their occurrence. Numerous remedies had been employed and various plans of treatment adopted, but all equally unsuccessful.

All the pathognomic symptoms existed, and as violent as imagination could conceive them. The ordinary excitants were eating, drinking, speaking, and touching the parts. The pain resided in both maxillary nerves, but especially in the superior; the whole cheek exceedingly sensible when touched, particularly around the emergence of the superior maxillary nerve from the foramen infra-orbitarium. During the most urgent

paroxysm, no discolouration of the integuments was perceptible. The muscles of that side were flaccid, and the cheek more prominent than the other; restless nights from pain, intense mental anxiety, torpid bowels, defective appetite, and all the phenomena indicative of severe alimentary disturbance. After the intestinal canal had been regulated by aperients, carb. ferri, in doses of from ʒij. to ʒvj. were exhibited three or four times a day, and hydr. submur. gr. ij. sing. noct. until the mouth became slightly affected; still after the lapse of some weeks no relief was obtained. Various remedies were subsequently used: ex gr. quinine, carb. ammon. camphor, opium, hyosciamus, ext. humuli, and ext. belladon. applied extensively to the pained parts; in short, every antispasmodic and narcotic medicine was prescribed, without either removing the disease or alleviating its severity.

Liq. arsenicalis was now commenced with, and with a full determination to give it a fair trial, by pushing it as far as the system would permit, beginning with the dose of m. v. and increasing it to m. xxxv. ter indies; at the expiration of which time, decided benefit was obtained; the paroxysms were less frequent, of shorter duration, and less violent; but the medicine was obliged to be discontinued in consequence of the aggression of gastric irritation, muscular tremors, and twitchings. Gentle aperients were in the mean time administered. In a few days the arsenical solution was resumed, commencing with only m. x. ter indies, and gradually increased.

In six weeks from the commencement of giving this medicine, every symptom was decidedly mitigated, and in two months had entirely vanished.

It is now three months since the drawing up of this case, and as there has been no return of the disease, we may presume that it is eradicated, and by the agency of arsenic.

August 6th, 1832.

MR. RADFORD ON THE PRACTICE  
INCULCATED BY DR. WALLER.

To the Editors of the London Medical and  
Surgical Journal.

GENTLEMEN,

I HAVE no doubt you will agree with me, that Dr. Denman's *Introduction to the Practice of Midwifery*, was deservedly esteemed as the best book upon this subject at the time it was first published, and also that it has maintained a very high character to the present time. Notwithstanding the high reputation obtained by this work, it must be acknowledged that, "owing to the advancement made in the obstetrical department of medical science, since the time of the talented and venerable author," many parts are defective, and others not consonant with the rules prescribed by writers and teachers of the present day. In the last edition, Dr. Waller has attempted to fill up this chasm, by adding a number of notes, in the accomplishment of which he says, "it has been my wish to tread as much as possible in Dr. Denman's footsteps, &c."

At page 312, after commenting upon the superiority of the craniotomy forceps invented by Mr. Holmes, Dr. Waller proceeds to say, that, "For cases of extraordinary difficulty, an instrument has been invented by Dr. Davis, for cutting up the basis of the cranium, after the frontal, parietal, temporal, and occipital bones have been removed. The instrument, however, is a dangerous one, and in the hands of those not much accustomed to its use, might inflict very serious injury to the soft parts of the mother.

"The editor has never yet witnessed a case wherein the steady, cautious, and patient use of Holmes's forceps has not succeeded. Should he meet with so great a degree of distortion as to prevent the extraction of the child in the usual manner, he would much prefer the plan proposed by Dr. Osborne, and the following case, recorded in his *Essays on Midwifery*, is

so full of interest, that he feels he should fail in his duty if he neglected to transcribe it."

The case referred to in the above quotation, is that of Elizabeth Sherwood, which is fully cited.

We infer from Dr. Waller's statement, that he recommends to his readers the perforator and crotchet, in cases of distortion of the pelvis equal in degree to that of Elizabeth Sherwood, and a similar conduct to be pursued in the subsequent parts of the delivery as was adopted by Dr. Osborne in that instance. It is not my intention to enter into an analysis of the case alluded to, as this has already been so ably accomplished by my much esteemed friend Dr. Hull, by Dr. Hamilton, and by Dr. Dewees, to whose works I beg to refer your readers.

The rules inculcated by Dr. Osborne, as deduced from Sherwood's case, for the relief of labours protracted by extreme distortion of the pelvis, are so much at variance with those I have been in the habit of teaching, that I feel anxious to ascertain, if it is the object of Dr. Waller to recommend obstetricians to open the head of a child, and attempt delivery by the crotchet, in a pelvis whose dimensions are similar to those of the case cited by him from Dr. Osborne's essay.

It is highly important to ascertain, whether this is intended to stand as a positive principle of practice, as Dr. Denman's book is one which is likely to be consulted by students; if correct, it will stand the test of investigation; if erroneous, it becomes the duty of every well-wisher to society, to point out immediately the error of any rules whose foundations are not based on truth, and especially such as are involved in the present question.

In this communication I disdain all personal feeling, or disposition to detract from the character and merits of the individual to whom I have referred, my object is alone directed to the inquiry into a rule of practice;

and I shall therefore feel obliged if you will inform me whether I have misinterpreted the meaning of Dr. Waller.

I have the honour to be,  
Gentlemen,  
Your most obedient servant,  
THOMAS RADFORD.  
King-street, Manchester.

### Hospital Report.

ST. THOMAS'S HOSPITAL.

#### JAUNDICE.

EDWARD MANNING, aged 40, a sailor of a spare habit, and short stature, was admitted, July 19th, into Jacob's Ward, under the care of Dr. Roots. Has been home from the East Indies four months. During the time he was abroad, a period of several years, he never suffered from illness; but on coming up the river home he got very wet, and to this he attributed the foundation of his complaint. It appears from his account, that since he got so wet, he has been troubled with ague, accompanied with pain about his abdomen. Within the last three weeks he has become jaundiced, and has not had a return of his aguish fit for a fortnight. At the present time his abdomen is tense, and he cannot endure the pressure of the hand, which gives him more acute pain when placed on the right hypochondrium. His eyes, tongue, and palate, as well as the whole surface of his body, even the finger and toe nails, are of a deep yellow colour. He feels sick, weak, and has no appetite; bowels open once, sometimes twice a day; stools very white; pulse 88, small, but bears some pressure; has emaciated considerably since his return to England.

*C. C. hypochond. dext. ad ʒx. et postea emp. canth.*

*R. Pilul. hydrarg. gr. v. bis die c. haust efferves. i. d.*

and to be placed upon a milk diet, with arrow-root and sago.

23.—Has been very restless since the 19th; disturbed sleep at night; pain about the hypochondrium not so violent, but still experiences pain in the abdomen, which remains tense on pressure. His bowels have become relaxed; the evacuations of the same white colour; urine small in quantity, and of a saffron hue.

*R. Opii gr. j. statim sumend.*

25.—Continues much the same.

*Rep. opii statim et enema opii vesp.*

should the bowels continue relaxed.

26.—Bowels more regular, but stools of the same colour; urine the same; pulse small and feeble, 70; gets no rest at night.

*Hydrarg. cretá, gr. v. opii gr. ss. bis die.*

28.—Continues the same.

*Ung. hydr. fort. ʒj. abdom. affricand. omni nocte.*

31.—Continues very restless; gets no sleep at night; complains this morning of pain in the chest, with cough.

*Emp. canth. sterno.*

August 1.—pain in the chest and cough better; the other symptoms remain the same.

*Mutton chop et vin. rub. ʒiv. quotidie.*

*Extract calocynth, comp. gr. x. all. nocte.*

4.—Continues the same.

*Hydrarg. c. cretá gr. v. b. d.*

*Ol. ricini ʒss. pro re natá.*

5.—Appears almost exhausted for want of rest; bowels open twice a day; the colour of evacuations remains the same; urine the same colour, but a little more in quantity.

*Liq. opii. sed. ʒxxx. c. mist. camph. ʒx. statim.*

6.—Continues to be very restless; has scarcely got any rest for this last week. He is evidently much worse this morning, and appears sinking.

*Vin. rub. ʒviiij. daily.*

*Subcarb. ammon. gr. x.*

*Sp. æther. nit. ʒj.*

*Mist. camph. ʒx.*

*ʒft. haust. 6tis horis sumend.*

*Morphiæ acetat. gr. ss. hac nocte.*

7.—He has continued to sink since yesterday, and at half-past three

o'clock this morning death closed the scene.

*Sectio cadaveris.*

Upon opening the abdomen, an immense quantity of fluid escaped tinged with bile; the peritoneal lining of the liver had become thickened from chronic inflammation. There was a small abscess, about the size of a hazel-nut, situated upon the superior and anterior part of the right lobe of the liver; every other part was healthy in appearance, but to the touch the substance of the liver was harder than usual. The pancreas had become scirrhus, more especially the right extremity of it, or that part which is frequently called the head, and lies upon the ductus communis choledochus. The gall-bladder was greatly distended, containing nearly a pint of fluid, the colour of which was darker than usual, somewhat resembling tar mixed with oil. Its substance was much thickened, especially about the neck, fundus, and ductus communis, which Dr. Roots remarked was owing to the muscular strength of the bladder, in its effort to expel the contents, being overpowered by the pressure of the scirrhus head of the pancreas upon the ductus communis choledochus. This canal was pervious, but considerable pressure on the bladder was required, owing to its thickened state, to allow the contents to escape. The mucous membrane of the stomach presented several patches of extravasation, it was soft, and easily lacerable with the finger. The left kidney was found much harder than the right. On cutting into it, it presented a scirrhus character, whilst the right remained healthy; the lungs and other viscera were found healthy. On examining the teeth, the bony parts were found tinged with bile. The brain was not examined.

*Operations.*

On Friday, the 2nd of August, Elizabeth Parsloe, a healthy-looking girl, 16 years of age, who was admitted July 25th into Dorcas Ward of

this hospital, in consequence of a large steatomatous tumour, situated on the right iliac region, extending from the eleventh rib to about the centre of the dorsum of the ilium, which she stated had been gradually increasing since she was one year old, was brought into the operating theatre for its removal. Mr. Travers, under whose care she was placed, performed the operation in the presence of Mr. Green, and a number of visitors as well as students. He commenced by making two semi-elliptical incisions; the first on the anterior part of the tumour, the second on the posterior, thus forming an elliptical one. The integuments were dissected back to form the flaps, and the tumour then removed; it consisted of a large mass of adipose substance, weighing six pounds fourteen ounces; two small vessels were secured, the integuments then brought together, and retained in apposition by three sutures, and adhesive plaster. The patient bore the operation heroically, and is doing well.

Two other operations were performed by Mr. Travers; one, amputation of the thigh for a scrophulous knee-joint—the other, castration for a scirrhus testicle, which, it is almost needless to say, were performed in the most skilful and expeditious manner.

PENNSYLVANIA HOSPITAL.

INJURIES OF THE HEAD.

CASE 1.

*Compression of the Brain from effusion of blood into the Ventricles.*

A labouring man was brought into the hospital in November, 1830, with an injury of the head. The account given by the persons who brought him, was, that two hours before a large tackle block had fallen from a height of eight or ten feet and struck him upon his head—that after a few minutes he got up apparently but little injured, and walked from the

vessel on board of which the accident happened to the wharf, where he sat down and conversed with the persons around him—that after about an hour he began to be stupid, which state increased gradually till it ended in insensibility.

When admitted he was completely insensible, with both pupils strongly contracted—his pulse was tense and his breathing slightly stertorous.

His head was shaved and examined, but there was no external wound, and no depression of bone could be perceived, but there was great effusion of blood beneath the skin.

Previous to his admission he had vomited, and had been bled. A consultation was called, and it was agreed to cut down upon the bone in order to ascertain whether or not a fracture existed—this was at once done by Dr. Hewson, and it was found that the bone was uninjured. It was now determined to treat it in the same manner as a case of apoplexy, and a branch of the occipital artery which had been divided in making the incision was allowed to bleed freely.

A few hours after the incision was made the patient died.

*Examination thirty-six hours after death.*

The vessels of the brain were much congested, and a large quantity of clotted blood, thought to amount to six ounces, was found in the lateral ventricles. There was also some effusion of blood at the base of the brain.

CASE II.

*Abscess of the Brain.*

John Gribi was admitted on the fourth of December, for a wound on the left side of his head, which he had received five weeks previously.

A few days before he was admitted, he was attacked with convulsions which were believed to be caused by the pressure of pus upon the brain, and he was sent into the hospital for the purpose of having an operation

performed upon him. Upon examination of the wound it was found that there was a fracture of the bone with some depression.

He was sensible, his pulse was slow and regular, his pupils were contracted, the whole of his right side was paralytic, and there was a great disposition to sleep. As he had no convulsions after coming into the house, and as he was sensible, an operation was not thought of, and a poultice was applied to the wound. He continued in this state till the morning of the 7th, when he became insensible.

A consultation was now called, and it was determined to remove the portion of bone which was fractured, in order to ascertain whether or not the compression was produced by pus between the dura mater and bone. Dr. Hewson accordingly enlarged the wound and used the trephine. No pus was found beneath the bone which was adherent to the dura mater.

No change in the symptoms took place after raising the bone—simple dressings were applied to the wound and a large injection and ten grains of calomel were given to him. Early on the next morning I found him with all the symptoms of apoplexy—a flushed face, a remarkably slow pulse, deep breathing and dilated pupils. He was now bled, sinapisms were applied to his extremities, and another injection was administered. His pulse rose under the bleeding, his breathing became more natural, and his face less flushed, but a few hours afterwards he died.

*Examination twenty-four hours after death.*

On removing the skull-cap a small quantity of pus was found between it and the dura mater, immediately below where the trephine had been applied.

On cutting into the left hemisphere of the brain an abscess was found, just below the surface, which extended upwards of two inches in one direction, and an inch and a half in the



other, and contained three or four drachms of pus. An unusual number of red dots appeared in the brain, and the anterior part of its left side was softened. The vessels of the dura mater were injected.

## CASE III.

*Fracture with depression, followed by inflammation of the Brain.*

John M'Quiggen, aged twenty-six, was admitted January 23rd, with a wound on the back part of the left side of his head caused by a blow which he had received on the previous night from the sharp end of a spade. Upon examination it was found that there was fracture of the bone with depression.

The skin was cool, and he was faint from the large quantity of blood which he had lost, but had no symptoms of compression of the brain.

The wound was dressed with adhesive plaster, and to guard against inflammation of the brain, he was kept perfectly quiet, was purged, and put on a very low diet.

He had no unpleasant symptom till the night of the 28th, when he complained of pain in the head, to relieve which, as it was judged his pulse would not bear bleeding, cups were freely applied.

On the morning of the 29th he became delirious, and continued so during the afternoon and evening: ten grains of calomel were now given to him and repeated in the night.

At 3 o'clock on the morning of the 30th he was insensible, had stertorous breathing and dilated pupils, and at 4 o'clock he died.

*Examination eleven hours after death.*

The wound of the scalp was two inches in length; the bone was fractured for about the same length, and driven in upwards of a quarter of an inch upon the contents of the head—the dura mater was cut through, and the brain itself wounded.

Portions of the posterior and middle lobes of the left side of the brain,

and a portion of the posterior lobe of the right side were disorganized.

The membrane lining the lateral ventricle at their posterior part was inflamed, and about a table-spoonful of pus mixed with blood was contained in it.

There was slight effusion of blood beneath the dura mater, at the top of the head, and also effusion at the base of the brain. The dura mater was inflamed.

## CASE IV.

*Abscess of the Brain.*

F. S. an insane patient in the hospital, was accidentally struck on the left side of his head by a quoit, on the 12th of April.

Upon examination, it was found that the skull was fractured and driven in upon the brain.

No symptoms of compression followed the blow, and after allowing the wound to bleed freely, it was dressed with lint, spread with simple cerate, and the usual means for preventing inflammation of the brain were resorted to.

After a few days he had fever, attended with pain in his head, for which he was purged with calomel, had a solution of tartar emetic given to him, and cups, leeches, and cold applied to his head. His fever gradually left him, but on the 25th he appeared more dull than usual, and on the morning of the 26th had a chill, which was followed by a state of insensibility, and on the afternoon of that day he died.

*Examination twenty-four hours after death.*

The fracture was an inch and a half in length, and the dura mater beneath it was cut through.

A thin clot of blood was found between the dura mater and the bone, and there was also slight effusion of blood beneath the dura mater.

Immediately beneath the fracture an abscess was found, of the size of a large walnut. The whole brain presented fewer red dots than usual when

cut into, and with the exception of that part just around the abscess, which was much softer than usual, and of a light yellowish hue, was of the natural consistence and colour.

The membranes of the brain were not at all injected, or their structure in any way altered. There was slight effusion of serum beneath the arachnoid, but none in the ventricles.

## CASE V.

*Compression of the Brain from effusion of blood.*

Charles Devonport, a coloured man, fell from a height of twenty-five feet on the morning of the 13th of August, and received an injury of his head, on account of which he was immediately conveyed to the hospital.

When admitted, his skin was cool, his pulse feeble, and his pupils natural—his attention could be roused when spoken to loudly, but he was unable to answer correctly.

Upon shaving his head, it was found that there was no external wound, but that there was great effusion of blood beneath the skin on the left side of the head.

Sinapisms and heat were applied to his extremities, and cold to his head.

In the latter part of the day he vomited bilious matter twice; his head was hot; pulse still feeble, and the insensibility greater. External stimulants were continued, and in addition to them, cups were applied to his temples.

At 4 o'clock on the morning of the 14th he died.

*Examination twelve hours after death.*

On cutting through the integuments a very large quantity of blood was found effused beneath the skin, and on removing the skull-cap, about 3ss. was found between the dura mater and bone at the back part of the head.

Upon examining the skull a fissure was seen extending from the side of the foramen magnum up through the occipital bone to the sagittal suture,

travelling up that suture about half its length, and from thence extending into the parietal bone of the left side for two inches. The sides of the occipital bone were separated from each other to the extent of a line. The longitudinal sinus of the dura mater had two wounds in it just above the torculi herophili, one of which was large enough for a common-sized quill to pass through. There was some effusion of blood beneath the pia mater on each side of the cerebrum, and also on the upper and back part of the cerebellum.

About an ounce and a half of blood was found under the pia mater at the base of the brain. The vessels of the brain were much congested, and a small quantity of bloody serum was found in the ventricles.

## CASE VI.

*Compression of the Brain from depressed bone.*

Edward Morris, a coloured boy, aged fourteen, was admitted into the hospital, August 25th, with compression of the brain. A few hours before his admission he had been struck upon the upper part of the left parietal bone with a sharp stone, which had produced a large wound of the scalp and fracture of the bone.

The persons who brought him to the hospital stated, that immediately after the receipt of the injury he walked a short distance and then fell in a convulsion: from that time till brought into the house he had had several convulsions, and when free from them he remained in a state of complete insensibility. Previous to his admission he had been bled.

Dr. Barton was in the house at the time of the admission of the patient, and at once enlarged the wound, which bled very freely, and exposed the injured bone, which was driven in, and formed as it were an inverted arch. As there was no fissure whereby the elevator might be got under the bone, the trephine was applied, and the depressed bone raised.

Upon raising the bone no pulsation was seen in the brain, but in the course of a few minutes the convulsion which he had went off, and the brain began to pulsate. He had three convulsions after the depressed bone was raised, and each time during the continuation of them there was an entire cessation of pulsation, but upon their going off the pulsation would again recommence.

The wound was lightly covered with a soft poultice, and as his skin was cold, heat was applied to his extremities.

After reaction had come on, thirty-five leeches were put upon his temples.

Although free from stertor, yet his insensibility continued till late in the afternoon.

By night he was completely sensible, and it was discovered that his whole right side was paralytic.

*August 26th.*—Has no pain in his head; pulse good; skin comfortable; is able to use the lower extremity of the right side; is not able to raise the arm, but has the proper feeling in it, and can move his fingers. His diet was directed to consist of mucilages, and a solution of cream of tartar was given him for drink.

*27th.* Has complete command of the right side of his body. Complains of his head feeling hot, but has no pain in it; pulse rather frequent. Took ʒx. of blood from him, and ordered ʒss. of salts to be given to him, which operated freely.

*58th.* No pain in the head; wound is suppurating freely and looks well; pulse good.

*30th.* Improves; pulse natural.

*Sept. 3d.* Continues to improve. The dura mater is now covered with granulations, and the wound is filling up rapidly. From this time his diet was gradually increased, he improved regularly, and by the 20th of October the wound was entirely healed.

The members of the profession, who consider the damages awarded in the case of *Ramadge v. Ryan* excessive, have commenced a subscription to enable the defendant to apply for a new trial.

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# London Medical and Surgical Journal.

No. 30.

SATURDAY, AUGUST 25, 1832.

VOL. II.

SELECTIONS  
FROM THE  
CLINICAL LECTURES,  
DELIVERED AT THE  
HOTEL-DIEU IN PARIS,

*During the Session of 1831 - 32;*

BY BARON DUPUYTREN,  
PRINCIPAL SURGEON OF THAT HOSPITAL.

*On Fractures of the Patella.*

FRACTURES of the patella offer many interesting points for examination, on which the opinions of authors are yet divided. Such are particularly the mechanism by which they occur, the method of treatment, or the more appropriate apparatus, the formation of calus, and especially the possibility of obtaining immediate re-union of the fragments.

Six cases of this kind have been treated at the Hôtel-Dieu, since the commencement of the present year: the fracture has been invariably transverse in the vertical direction; five have been perfectly cured, without deformity, and have recovered the free use of the limb; one is yet under treatment. In the latter, the fracture was the result of a fall on the left knee; it was accompanied by considerable tumefaction, caused by an effusion of blood in the soft parts, and of sanguinolent synovia in the articular cavity. Nevertheless it was not difficult to recognize the injury. On pressing the finger over the patella, and making a little pressure, rather a large space could be discovered, separating the bone into two portions, which could be moved very distinctly in contrary directions, brought together by extending the limb, and crepitation caused by rubbing them together; in spite of the serious accidents which complicated the case, the patient is rapidly progressing to a cure. But in this case, as in many others, it happened that the bandage,

which had its *point d'appui* solely on the skin, cleared it from before backwards, and formed it into a fold, which interposed between the fragments, and kept them separate. A new mode of dressing was accordingly adopted.

Fracture of the patella may be produced in two ways; by direct force on the anterior region of the knee, or by violent efforts of the extensor muscles of the leg. Nevertheless it has occasionally occurred without any considerable exertion of muscular power; cases are recorded in which it has happened from leaping, kicking, or endeavouring to avoid falling backwards. In all these cases, the patella is only supported by a portion of its posterior surface on the anterior part of the condyles of the femur, while the inferior extremity being semi-flexed, the ligamentum patellæ, and the tendon of the extensors drawing its extremities slowly backwards, during the effort which takes place, the femur serves as a *point d'appui* to the forces which are acting superiorly and inferiorly on the patella, and a solution of continuity occurs proceeding from before backwards.

A great number of these fractures have been wrongly attributed to falls on the knee. It has not been remarked that in such a case, almost the whole weight of the body bears on the protuberance of the tibia, to which the ligamentum patellæ is attached, as the leg is flexed at right angles; this prominence of the bone strikes the ground first, and receives the whole shock, whilst the rotula, retained above by the rectus femoris, and preserving, in a great measure, its vertical position, cannot touch the ground on which the knee rests, except by its lower extremity. Falls on the knee are then often the result, and not the cause, of fracture of the patella; it is because the fracture has occurred that the man falls, and the fracture is not the effect of the fall.

Cutting or contusing bodies, acting directly on the knee, may break the patella into a greater or less number of fragments; this accident may happen in a fall, if the leg is strongly flexed on the knee, and if the bone

In regard to the reunion of the fragments in the transverse fracture, their separation being produced and incessantly increasing by the action of the extensor muscles, the tendon of which is inserted on the superior portion, and by the greater or less degree of flexion of the leg, the first indication will be to neutralize this muscular power, and to place the limb in a proper position. This position, an absolute immobility until the callus is perfectly consolidated, and the application of a retentive apparatus, to maintain the fragments in exact apposition on the one hand, and, on the other, to resist the contractions of the extensors resulting from the inconsiderate or involuntary motions of the patients, are the conditions essential for obtaining a perfect reunion. The apparatus of which I make use, consists of—1st, an inclined plane formed of pillows placed one upon the other, which ought to extend from the heel to the tuberosity of the ischium, and which has the double object of opposing the contractions of the flexors of the leg, and of placing, by the position which it gives the limb, the extensor muscles in a state of complete relaxation; 2ndly, two compresses, twenty inches long and four wide, made of new cotton, thick and resisting; one having three holes at one end, and the other three straps at one end; 3rdly, two bands, three fingers broad, and eight or ten ells wide; 4thly, some graduated compresses, six or seven inches long, and seven or eight lines wide.

I begin by enveloping the foot with some turn of the bandage; I then place on the part of these turns corresponding to the dorsal surface of the foot, the extremity of one of the long compresses; it is fixed by means of pins, and two or three new turns of the bandage, and then extended from below upwards on the anterior surface of the leg. This being done, the bandage is applied along the leg to the patella, where it is fastened.

Whilst an assistant supports powerfully the muscles of the posterior region of the thigh, the operator then surrounds this, about the middle, with three turns of the second bandage; then places the extremity of the second long compress on its anterior surface, which is fixed by two or three new turns, and then extended from above downwards; two or three circular turns more are made, and the bandage is applied as far as to the patella, and what remains is rolled round the thigh. Graduated compresses are then placed above and below the patella, and the straps of one of the long compresses being passed into the holes of the other, the fragments are brought together by exerting traction on the two compresses. Finally, the two extremities of these compresses are fixed, one on the thigh, and the other on the leg.

The apparatus being thus applied, the

lower extremity is then placed on the inclined plane, of which I have already spoken. Its inclination is directed from the foot towards the ischiatic tuberosity. In other words, the most elevated point of the plane formed by the pillows, corresponds with the heel and the inferior part of the leg, and the lowest point to the superior part of the back of the thigh, so that the heel is much higher than the knee and thigh.

From this description you will perceive that the apparatus consists of four distinct pieces, each exercising an isolated action, nevertheless connected the one with the other, and forming a whole concurring to one end. The first, the inclined plane formed of pillows, is destined to keep the limb in a state of extension; the second applied to the leg and foot, and the third on the thigh, are intended to prevent muscular contractions throughout the whole extent of the limb; finally, the fourth maintains the broken portions of bone in exact and continued apposition. Nevertheless, although this apparatus presents incontestable advantages, sanctioned by experience, it would be insufficient, as well as all that can be imagined, to produce union without separation, unless the patient seconded its effects by his docility. Thus he should be especially recommended to keep the limb perfectly quiet. About three weeks since, two individuals who had had this accident, left this hospital cured, but one of them, a turbulent, indocile young man, was continually moving his limb, and removed the apparatus several times during treatment, in him the parts were separated for about an inch; the other, on the contrary, who had supported patiently and courageously the inconvenience of repose and the pressure of the bandage, had only a groove, so slight that it could scarcely receive the head of a common pin.

This fact and many others which I have observed during my practice, leave no doubt on my mind as to the possibility of obtaining immediate union of the fragments by the production of an osseous callus, if they can be kept in apposition for the period of time necessary to effect consolidation.

In the most common cases reunion takes place by means of a fibro-cellular substance, which forms between the fragments. Sir Astley Cooper, and other surgeons have carefully observed fractures of the patella and of the neck of the femur, and after having exposed these bones to the action of turpentine, have found a transparent, fibrous, or fibro-cartilaginous substance between the fragments. When this celebrated English surgeon came to Paris in 1829, I shewed him specimens in which an immediate reunion had taken place, and where this fibro-cartilaginous matter could not be perceived. This reunion ought doubtlessly to be attributed to the long space of time which had passed since the cure; the

callus had had time to become osseous. Observe, in effect, what passes in vertical fractures, and you will be convinced of the justice of this opinion. In this case, as there is no separation, the callus is always ossified at the end of six months or a year. It is then this separation, produced by the action of muscles, which prevents ossification, and when this diverging power can be neutralized, a transverse reunion will be similar to a longitudinal one.

But however firm and well applied the retentive apparatus may be, its action is continually weakening, from the relaxation of the bands which compose it, and the shrinking of the tissues which it compresses; whilst the muscular power is augmenting in equal proportion. On the other hand, the compression which the bandage causes often becomes insupportable to the patient, and it is necessary to relax it or abandon it altogether. It sometimes produces serious injury; inflammation, tumefaction, and excessive tension, and, consequently, gangrene. These results occur the more readily the earlier after the fracture the apparatus is applied; so that at first you should tighten it moderately, and pay great attention to the patient, in order to be able to prevent in time the consequences which I have just noticed.

In support of these precepts I will narrate to you a recent fact, which has been published, and which ought to have inspired the surgeon with deep regret for not following them. Facts attract attention more, and are more likely to be remembered.

A man, 43 years of age, fell on the right knee and fractured his patella; he was taken to one of the Parisian hospitals (not the Hôtel Dieu). The next day the joint was very much swelled and painful; nevertheless, an apparatus, somewhat similar to mine, was applied; it was so tight that even during the evening the patient could not support the pain it caused; he passed the night in agitation and uttering continual cries; no attention was paid to this on the third day, and it was only at the end of forty-eight hours, four days after the dressing, that the continued and violent cries of the patient decided the surgeon to remove the apparatus. Ecchymoses had formed on different parts of the leg and foot; dark spots were already observable; nevertheless, a bandage as tight as the first was reapplied, but the state of health of the patient caused it to be abandoned the next day. Numerous dark spots then existed on the dorsum pedis and on the leg; gangrene supervened, with delirium, and hot and pale skin; the lower part of the leg became cold, insensible, and fell into the state of mortification. The sixteenth day after the fracture there was scarcely any hope of preserving life, even at the expense of the limb. Amputation was performed above the knee, and the patient sunk the next day.

The fracture was transverse; the two frag-

ments were separated about an inch from each other; they preserved relations with each other by means of the continuity of the extensor tendon, which had not been divided, and by small fibrous bands which extended across, arising from the interior and not the surfaces of the bone. These bands were at first taken for new productions, but this opinion was changed when the degree of resistance which they offered was compared with the date of their formation. The fractured portions did not present any asperities. They appeared to have been removed by absorption. Between the two portions there was a reddish substance, the consistency of which was greatest near the fractured bone. In this part it was almost cartilaginous, and appeared already to make part with the patella.

The treatment of vertical fractures requires repose, immobility, and complete relaxation of the muscles, as much as the other variety. It has been proposed, on theoretical views, to excite contraction of the triceps femoris, in order to approximate the broken portions. This practice is bad, and experience proves that by causing the articulation to project, the fragments are separated from each other, probably in consequence of the anatomical disposition of the bony surfaces, and of the insertion of the articular capsule around these fragments. Tension of the soft parts is no more proper for this case, than for the reunion of longitudinal wounds of muscles. These purely speculative ideas are not justified by practical results. The better proceeding would be to maintain in complete relaxation, and this principle is applicable to all analogous injuries. Besides, a passive state of the parts is the only one which can be supported: you must never forget that patients cannot sustain permanent contraction.

The limb should be kept somewhat elevated on pillows, and protected by a cradle from the pressure of the bed clothes. In this position the fragments cannot separate from each other, and the process for the formation of callus goes on regularly.

In these kind of fractures, as in those of the neck of the femur, the callus becomes consolidated within sixty, or eighty, or even more days. At this period, if the state of the soft parts will allow of it, the patient may take gentle exercise, for the disposition of the fragments no longer gives reason to fear elongation or deformity of the callus. Besides, the knee may be strengthened by the use of a knee bandage or a roller. Experience and observation shew that by keeping the patient longer in bed, the formation of an osseous cicatrix, almost imperceptible, and very firm, may be obtained; in a word, the extent of the fissure or separation observed after the formation of callus is in inverse ratio to the continuance of this measure. A man, having met with a comminuted fracture of the patella in a fall, and having likewise broke the upper part of the femur and the cranium,

was obliged to remain five months in bed. For a month or six weeks the ordinary retentive apparatus was applied, and renewed as often as it became relaxed. At the end of the five months the patella was so exactly and so solidly united, that there did not remain any appreciable trace of the solution of continuity, except some very slight and hard inequalities on its surface.

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THE  
ANATOMICAL EXERCITATIONS  
OF  
WILLIAM HARVEY, M.D.

(Continued from page 44.)

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CHAP. X.

*The first supposition relative to the quantity of blood passing through from the veins into the arteries; and that there is a circulation of the blood vindicated from objections, and further confirmed by experiments.*

Thus far the first supposition is confirmed, whether the thing be referred to calculation, or whether we try it by experiment and autopsic examination, namely, that the blood continually passes out of the veins into the arteries, in a much greater abundance than can be supplied by aliment, so that the whole mass of blood passing through that way in a short space of time, it must necessarily follow that there should be a circulation, and that the blood should return.

But if any one should say that a greater abundance is able to pass through, and it is not necessary a circulation be made, since it is re-supplied from the ingesta, and take as an exemplification of this the milk in the mammæ, for a cow in one day will give three, four, or seven, or more gallons of milk; the same with a woman nursing one or two infants, who will give two or three pints daily, or more, which it is manifest are to be restored from her ingesta. We will answer that the heart, after a calculation made, sends out much more in one hour than it does in another. But if, not as yet satisfied, he shall still press further and say, that although by the dissecting of an artery, and thus giving or opening a way, it comes to pass, besides the course of nature, that the blood is effused forth with an impetus; yet it does not therefore happen in an entire body, no outlet being given, and the arteries being full, and constituted according to nature, that such a great quantity should pass through in so short a space, insomuch that there must necessarily be made a regress. Ye will answer, that by calculation it appears from a former reckoning, that how much the heart being filled, does contain more in its dilatation than in its contraction, so much (for the most part) at

every pulsation is emitted, and for what cause does there such an abundance pass through, the body being whole and constituted according to nature.

But in serpents and in some fishes, binding the veins a little beneath the heart, you will see the distance betwixt the heart and the ligature emptied, so that you must needs affirm the course of blood, unless you deny your eye-sight. The same shall clearly appear afterwards in the confirmation of the second supposition.

Let us conclude, confirming all these things with one example, so that every one may believe his own eyes; if any one will dissect a live adder, he shall see the heart pulsate calmly and distinctly for a whole hour and more, and so contract itself (being oblong in its construction), accordingly it is longitudinal, contracts, and propels and thrusts itself out again like a worm. It is of a whitish colour in the systole and contrary in the diastole, together with all the rest, by which I said this truth was evidently confirmed; for here the parts are longer, more distinct, and clearer than the meridian sun at noon day. The vena cava enters the inferior part of the heart, the artery egressing from the superior part; now compressing the vena cava with a pair of pincers, or with your finger and thumb, and the course of the blood being intercepted a little space beneath the heart, you will then perceive (by means of the pulsation) immediately that place which is betwixt your fingers and the heart to be almost emptied, the blood being exhausted by the pulsation of the heart; and that the heart will be of a much whiter colour, and also that it is smaller in its dilatation for want of blood, and at length pulsates more faintly, insomuch that it appears finally to die. As soon as you untie the vein, both colour and magnitude return to the heart. Afterwards, if you leave the veins and bind or grasp the arteries with ligatures or compresses, like the vein at a little distance from the heart, you shall on the contrary see them swell vehemently where they are grasped, and the heart swell beyond measure, and acquire a purple colour till it turns blackish again, and that it is at last oppressed with blood, so that you would be led to suppose that it would be suffocated, but by untying the ligature it returns to its natural condition in colour, magnitude and pulsation.

Behold now there are two kinds of death; extinction by reason of defect, and suffocation by too great a quantity. Here you may have the example of both before your eyes, and confirm the truth which has been spoken concerning the heart, by your own view.

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CHAP. XI.

*The second supposition is confirmed.*

The second is to be confirmed by us, by which it may appear clearer to our view, some experiments are to be mentioned, from

which it is evident that the blood enters into every part through the arteries, and returns by the veins, and that the arteries are the vessels carrying the blood from the heart, and that the veins are the vessels and ways by which the blood is returned to the heart itself; and that the blood in the limbs and extremities passes from the arteries into the veins (either directly by an anastomosis, or immediately through the porosities of the flesh, or both ways), as before it did in the heart and thorax, out of the veins into the arteries; whence it is manifest that in its circulation it moves thence hither and hence thither, to wit, from the centre to the extremities, and from the extremities again to the centre.

But likewise computation being afterwards made, it appears in the same place, that in regard of the abundance it can neither be increased by the ingesta, nor is there so much required for nutrition.

As likewise concerning ligatures, it is clear how they attract, that they do it not either by heat, pain, or force of vacuum, nor any other cause which has been already known to us; as likewise what convenience and use is afforded to physic by ligatures, how they stop or cause the flow of blood, and how they cause *gangrenes* and mortifications of the parts, and by this means how they are of use in the castration of animals, and in the removal of fleshy tumours and warts.

But truly it comes to pass, that no one has rightly understood the causes and reasons of all these things, though all almost, according to antiquated opinions, do propound and give their consent for ligatures in the treatment of disease, yet few in the administration of them are able to afford any help in their cures.

One ligature is strict and another mediocre. I call a strict ligature where a part is so straightly bound with the band or ligature, that you cannot perceive the pulsation of the artery any where beyond the ligature; such a one we employ in the excision of limbs, carefully avoiding hæmorrhage, and such are used in the castration of animals, and the ablation of limbs, by which ligature the afflux of aliment and heat being altogether intercepted, the vessels, and the testicles fade and die, and afterwards we see the great tumours fall quite away.

I call that a middle sort of ligature, which does compress the limb every way, but without pain, insomuch that it allows the artery to pulsate a little beyond the ligature; such a one for instance as is used in the attraction and emission of blood; for though you make the ligature above the elbow, yet you shall perceive the arteries to pulsate a little in the wrist if you touch it, if the ligature be properly applied in phlebotomy.

Now let there be an experiment made in a man's arm, either taking a band, such as they use in blood-letting, or by the stronger

grasp of the hand, which is more conveniently done in a thin person who has large veins, and when the body being heated the extremities are warm, and a greater quantity of blood is consequently propelled into the extremities, and there will be more vehement pulsations, for then all things will more evidently appear.

If you do then make a strict ligature, drawing it as straight as any one can bear it, you may first observe that beyond that ligature the artery does not beat in the wrist, nor anywhere else, and then immediately that the artery begins above the ligature, the diastole becomes higher, and pulsates more vehemently, and does as it were with a kind of tide rise towards the ligature (as if it did endeavour to penetrate and then open its flues, which is intercepted) and the passage which is stopt, and that the artery appears there to be fuller than usual. In the mean time the hand retains its colour and constitution, only in process of time it begins to be a little coldish, but nothing is attracted into it.

After that this ligature has remained awhile, and that in a sudden it is loosened into a middle sort, such I say as is employed in the abstraction of blood, you will observe the whole hand is imbued with colour, and distended, and also its veins become swelled and varicose; and that in the space of ten or twelve pulsations of the artery, at a great impulse, the blood is impelled forward, and you may see the blood cast into the hand in great quantities, and that a great quantity of blood is quickly attracted by the ligature, without either pain, or heat, or voiding of the vacuum, or any other cause which has been already mentioned.

But if any one will properly apply his fingers to the artery, at the very moment of the loosening near the ligature, he shall feel as it were the blood passing under his finger.

Moreover, he, in whose arm the experiment is made, upon the change of a tight ligature into a mediocre or looser one (the obstacle being as it were removed), he shall clearly feel the heat and blood enter by pulsation, and perceive something to be diffused immediately by the conduct of the artery, and to be dispersed over his hand, and it becomes presently heated and distended. As in a strict ligature, the arteries above the ligature are distended, and they do pulsate not beneath the ligature, and the veins become less, so that in the middle sort of ligature, the veins rise, and become distended, but not above the ligature, and the arteries become less. Nay, if you compress the veins, unless you do it very strongly, you scarcely see the blood pass above the ligature, or the veins collapse. So that from these things it is easy for any man that will diligently observe, to know that the blood enters through the arteries, for by a strict ligature nothing is attracted to them, the hand keeps its colour,



nor is there any distention; but being a little loosened, as in the looser ligature, it is manifest that the hand is swelled, and that the blood by the force and impulsion is abundantly circulated; for when the arteries pulsate, as in the middle sort of ligature, the blood is protruded into the hand; but when this is not the case, as in the strict ligature, there is no pulsation, unless above the ligature. But in the meanwhile, the veins being compressed, it is impossible for any thing to flow through them; of which this is a sign, that beneath the ligature they become much more swelled than above, when the ligature is removed; hence it is clearly manifest that the ligature hinders the return of blood, through the veins into the superior parts, and makes those beneath the ligature remain swelled.

But the arteries in this case propel the blood beyond the ligature by the strength and impulsion of the heart, notwithstanding the application of a *moderate* ligature. The difference between the tight and the *moderate* ligature is, that the former obstructs the passage of the blood in the veins, but also in the arteries; the latter does not hinder pulsation, but extends itself, and propels the blood into the most remote parts of the body.

So that we may reason thus; when a *moderate* ligature is applied we see the veins swelled and distended, and the hand full of blood; but whence comes this? for the blood passes either through the veins or arteries beneath the ligature, or through the hidden pores, but it cannot pass out of the veins, much less by the hidden passages, and therefore it must be by the arteries, as we have said. It is apparent that it cannot happen through the veins, as the blood cannot be squeezed above the ligature unless you take this away, when we see the veins collapse and disburthen themselves into the parts above the ligature, the hand grows white, and all the former tumefaction and congestion disappear. He whose body or arm has been so tied will more readily perceive it, as his hands were tumefied and cold; I say he shall feel a sensation of cold up the arm to the axillæ with the return of the blood; which return of cold blood after venesection, after the removal of the bandage, I imagined to be the cause of fainting, which generally happens to strong men after the removal of the ligature, and was supposed to be caused by the return of the blood. Besides, we observe that upon loosening the tight ligature, the veins below the ligature, and not the arteries swell by the passage of the blood through the arteries; this is a proof that the blood passes from the arteries into the veins, and not the reverse; and that there is an anastomosis of vessels, or that the pores of the flesh or solid parts are pervious to the blood. It is also a sign that many veins communicate with each other, as many swell simultaneously

when a ligature is placed on the arm, and all collapse if only opened with a lancet.

Hence every body may know the attraction made by ligature, and perhaps of all the fluxes, as in the hands when a ligature is applied, the blood cannot circulate, and if it be driven at the same time through the arteries by the force of the heart, the part must necessarily be filled and distended.

Moreover it so happens, that there is an attraction made by the ligature, without any pain, heat, or force of the vacuum. But if by any pain the blood should happen to be attracted by any way to the arm, the hands, and the fingers, and the veins swell, and become varicose, the arm being tied at the elbow, seeing that by reason of the compression of the ligature the blood could not come thither through the veins, and why should there no sign appear above the ligature, either of tumour or repletion, neither any sign of attraction or a flux at all?

But this is the manifest cause of attraction beneath the ligature, and of swelling beyond measure in the hand and fingers, to wit, that the blood does enter forcibly and abundantly, but cannot return out again. This is the cause of swellings, and of all oppressive redundancy in any part, on account of the ways of ingress, are open, and the passages of regress shut; it must then necessarily follow that the fluid should abound, and the part be raised with swelling.

Whether may it not be from this cause, that in tubercles which are inflammatory, so long as the swelling receives increase, and is not in its ultimate stage, there is a full pulse felt in that place, especially in very hot tumours, and in which the increase is made on a sudden. But this shall form an after-dissquisition. As likewise whether that happens from this cause, which casually I had experience of in myself.

I being thrown from a curricule, and was somewhat injured in my forehead, where the little branch of the artery proceeds from the temples; there I perceived a tumour, about the magnitude of an egg, in the space of twenty pulsations, without either heat or much pain; on account of the vicinity of the artery, the blood was abundantly and more swiftly driven into the contused parts.

Hence it appears, for what cause in phlebotomy we wish the blood sometimes to gush out further, and with more vehemence, accordingly we bind it above the section of the vein, not beneath; but if through the veins there flows such a quantity, so great a quantity from the superior parts, that ligature would not only not help, but it will impede it. Then we ought to make the section beneath the ligature, so that the course of blood being impeded, it might flow out more abundantly, if it did traverse thither, and descend from the superior parts into the veins, and might flow through them; but since by other means it is impelled through

the arteries into the inferior veins, in which regress it is prevented by the ligature, the veins rise and distend, and with strong impulse they are able to cast and force out the blood further through the orifice, but the ligature being made slack, and the way of regress being thrown open, behold the blood no longer comes in a stream, but drop by drop; and that which every one knows, namely, if in phlebotomy you either loosen the ligature, or bind it tightly below, or compress the limb with too strict a ligature, then the blood does flow without force, because the passage by ingress and regress of the blood is intercepted. Therefore the ligature of the arteries being moderately tight, a freer egress is afforded by the veins than if the ligature is loose.

(To be continued.)

NEW DUTIES ON DRUGS.

We have been favoured with a Parliamentary document, which will be read with interest by a large portion of the profession; and therefore we have much pleasure in inserting it.

NEW DUTIES,

As amended by the Committee.

ARTICLES.	DUTY.
ALKANET Root . . . . .	cwt 0 2 0
Almonds, viz.	
Bitter . . . . .	cwt 0 4 0
Jordan . . . . .	cwt 2 0 0
any other sort . . . . .	cwt 1 0 0
Aloes . . . . .	lb 0 0 8
the produce of, and imported from any British Possession	lb 0 0 2
Amber, rough . . . . .	lb 0 0 6
Ambergris . . . . .	oz 0 0 6
Angelica . . . . .	cwt 0 4 0
Annatto, viz.	
Flag . . . . .	cwt 0 1 0
Roll . . . . .	cwt 0 4 0
Antimony, viz.	
Ore . . . . .	ton 0 1 0
Crude . . . . .	cwt 0 8 0
Regulus . . . . .	cwt 0 16 0
Argol . . . . .	cwt 0 0 6
Arrow Root, the produce of, and imported from any British Possession . . . . .	cwt 0 1 0
Arsenic . . . . .	cwt 0 8 0
Asphaltum . . . . .	cwt 0 4 0
Balsam, viz.	
Canada . . . . .	lb 0 0 1
Capiui . . . . .	cwt 0 4 0
Peru . . . . .	lb 0 1 0
Tolu . . . . .	lb 0 2 0
Bark, viz.	
for Tanners' or Dyers' use . . . . .	cwt 0 0 8

ARTICLES.	DUTY.
imported from any British Possession . . . . .	lb 0 0 1
of other sorts . . . . .	lb 0 0 1
Extract of, or of other vegetable substances, to be used only for tanning Leather, imported from any British Possession, cwt	0 0 1
Basket Rota, the Bundle not exceeding three feet in circumference at the band . . . . .	0 1 0
Benjamin or Benzoin . . . . .	cwt 0 4 0
Berries . . . . .	cwt 0 2 0
Bitumen Judaicum . . . . .	cwt 0 4 0
Boracic Acid . . . . .	cwt 0 4 0
Borax or Tincal, viz.	
Refined . . . . .	cwt 0 10 0
Unrefined . . . . .	cwt 0 4 0
Brazil Wood . . . . .	ton 2 0 0
Camomile Flowers . . . . .	lb 0 0 3
Camphor, viz.	
Refined . . . . .	cwt 2 0 0
Unrefined . . . . .	cwt 0 1 0
Camwood . . . . .	ton 0 5 0
Cantharides . . . . .	lb 0 1 0
Caoutchouc . . . . .	cwt 0 1 0
Cardamoms . . . . .	lb 0 1 0
Carmine . . . . .	oz 0 0 6
Castor . . . . .	lb 0 0 6
Chicory, roasted or ground . . . . .	lb 0 0 6
China Root . . . . .	lb 0 0 3
Cinnabaris Nativa . . . . .	lb 0 0 1
Citrat of Lime . . . . .	lb 0 0 2
Citric Acid . . . . .	lb 0 0 6
Cloves, imported from any British Possession in Asia, Africa, or America . . . . .	lb 0 2 0
Cobalt . . . . .	cwt 0 1 0
Cocoa Nuts . . . . .	lb 0 0 6
the produce of, and imported from any British Possession . . . . .	lb 0 0 2
Husks and Shells . . . . .	lb 0 0 1
Paste, the produce of, and imported from any British Possession . . . . .	lb 0 0 4
Colocynth . . . . .	lb 0 0 2
Columbo Root . . . . .	lb 0 0 2
Comfits . . . . .	lb 0 1 0
Copper Ore, the produce of, and imported from any British Possession in America . . . . .	ton 1 0 0
Cranberries . . . . .	gal 0 0 1
Cream of Tartar . . . . .	cwt 0 2 0
Cubeba . . . . .	lb 0 0 6
Dates . . . . .	cwt 0 10 0
Drugs, not particularly charged in this or any other Act . . . . .	cwt 0 10 0
Euphorbium . . . . .	cwt 0 6 0
Galls . . . . .	cwt 0 2 0
Gamboge . . . . .	cwt 0 4 0
Gentian . . . . .	cwt 0 4 0
Ginseng . . . . .	cwt 0 4 0
Granilla . . . . .	lb 0 0 2
Gum, viz.	
Animi, Copal, Arabic, Senegal, Tragacanth, Lac Dye, Shellac,	

ARTICLES.	DUTY.	ARTICLES.	DUTY.
Storax and other Gum, not otherwise charged in this Act . . . cwt	0 6 0	this or any other Act, except Tin Ore, for every 100 <i>l.</i> of the value	5 0
Hair, viz.		Painters' Colours, unmanufactured, not particularly charged in this or any other Act, for every 100 <i>l.</i> of the value . . . . .	5 0
— Cow, Ox, Bull or Elk Hair, cwt	0 0 6	Pink root . . . . . lb	0 0 8
Hellebore . . . . . lb	0 0 1	Pitch, Burgundy . . . . . cwt	0 0 8
Hemp, rough and undressed, or any other vegetable substance of the nature and quality of undressed Hemp, and applicable to the same purposes . . . . . cwt	0 0 1	Pomegranates . . . . . 100	0 15
Hoofs of Cattle, for every 100 <i>l.</i> of the value . . . . .	1 0 0	Pomegranate, Peels of . . . . . cwt	0 1
Jalap . . . . . lb	0 0 6	Quicksilver . . . . . lb	0 0
Jet . . . . . lb	0 0 2	Quinces . . . . . 1000	0 1 0
Ink for Printing . . . . . cwt.	0 10 0	Radix; viz.	
Juice of Lemons, Limes or Oranges, gal.	0 ½	— Contrayerva . . . . . lb	0 0 2
Lac, viz.		— Ipecacuanha . . . . . lb	0 1 0
— Stic Lac . . . . . cwt	0 1 0	— Serpentaria . . . . . lb	0 0 2
Lamp Black . . . . . cwt	1 0 0	Red Wood or Guinea Wood . . . . . ton	0 5 0
Latten, viz.		Rhubarb . . . . . lb	0 1 0
— Black . . . . . cwt	0 4 0	Safflower . . . . . cwt	0 1 0
— Shaven . . . . . cwt	0 6 0	Sago . . . . . cwt	0 1 0
Leaves of Roses . . . . . lb	0 0 2	Sal; viz.	
Live Creatures, illustrative of Natural History . . . . .	Free	— Ammonia . . . . . cwt	0 1 0
Maccaroni . . . . . lb	0 0 2	— Prunella . . . . . cwt	0 1 0
Mahogany, viz.		Salep, or Salop . . . . . cwt	0 1 0
— imported from any British Possession . . . . . ton	4 0 0	Sanguis Draconis . . . . . cwt	0 4 0
— imported from the Bay of Honduras, in a British Ship, cleared out from the Port of Belize, ton	1 10 0	Sapan Wood . . . . . ton	0 1 0
Manganese Ore . . . . . ton	0 10 0	Sarsaparilla . . . . . lb	0 0 6
Manna . . . . . lb	0 0 3	Sassafras . . . . . cwt	0 2 0
Mastic . . . . . cwt	0 6 0	Saunders, White or Yellow . . . . . cwt	0 1 0
Medlars . . . . . bushel	0 1 0	— Red . . . . . ton	0 1 0
Moss, viz.		Sausages or Puddings . . . . . lb	0 0 4
— Lichen Islandicus . . . . . lb	0 0 1	Scammony . . . . . lb	0 2 6
— Rock, for Dyers' use . . . . . ton	0 5 0	Seed; viz.	
— not otherwise charged, for every 100 <i>l.</i> of the value . . . . .	5 0 0	— Aniseed . . . . . cwt	0 5 0
Musk . . . . . oz	0 0 6	— Cummin Seed . . . . . cwt	0 2 0
Myrrh . . . . . cwt	0 6 0	— Fennel Seed . . . . . cwt	0 2 0
Nicaragua Wood . . . . . ton	0 5 0	— Hemp Seed . . . . . quarter	0 1 0
Nuts, viz.		— Lettuce Seed . . . . . quarter	0 1 0
— Cashew Nuts . . . . . cwt	0 10 0	— Worm Seed . . . . . cwt	0 2 6
— Pistachio Nuts . . . . . cwt	0 10 0	Senna . . . . . lb	0 0 6
Oakum . . . . . cwt	0 0 1	Skins, viz. Seal Skins in the Hair, not tanned, tawed, nor in any way dressed; of British taking doz. skins . . . . .	0 0 1
Ochre . . . . . cwt	0 1 0	Smalts . . . . . lb	0 0 4
Oil, viz.		Spelter, in Cakes . . . . . cwt	0 2 0
— Castor, the produce of, imported from any British Possession, cwt	0 2 6	Sponge . . . . . lb	0 0 6
— Paran . . . . . tun	8 8 0	— the produce of, and imported from, any British Possession . . . . . lb	0 0 1
— Chemical, Essential or Perfumed, viz.		Squills, dried . . . . . cwt	0 8 0
— of Carraways . . . . . lb	0 4 0	— not dried . . . . . cwt	0 1 0
— of Cloves . . . . . lb	0 14 0	Stavesacre . . . . . cwt	0 4 0
— of Lavender . . . . . lb	0 4 0	Steel, unwrought, prepared in and imported from any British Possession in Asia, Africa, or America . . . . . ton	0 1 0
— of Mint . . . . . lb	0 4 0	Stone, viz.	
— of Peppermint . . . . . lb	0 4 0	— Marble in Blocks . . . . .	Free
— of Spike . . . . . lb	0 4 0	— Emery Stones . . . . . ton	0 1 0
— of all other sorts lb	0 1 4	Straw for plating . . . . . cwt	0 0 1
Olibanum, or Frankincense . . . . . cwt	0 6 0	Succinum . . . . . lb	0 0 6
Orris, or Iris Root . . . . . cwt	0 10 0	Tapioca . . . . . cwt	0 1 0
Ores, not particularly charged in		Tartaric Acid . . . . . lb	0 0 4
		Teeth, viz.	
		— Sea Cow, Sea Horse, or	

ARTICLES.	DUTY.
Sea Horse Teeth . . . . . cwt	1 0 0
Terra, viz.	
— Japonica, or Catechu . . . . . cwt	0 1 0
— Sienna . . . . . cwt	0 4 0
— Umbra . . . . . cwt	0 4 0
— Verde . . . . . cwt	0 1 0
Tortoise-shell, unmanufactured, imported from any British Possession . . . . . lb	0 0 1
Valonia . . . . . cwt	0 1 0
Vanelloes . . . . . lb	0 5 0
Verdigris . . . . . lb	0 1 0
Vermicelli . . . . . lb	0 0 2
Vermillion . . . . . lb	0 0 6
Woad . . . . . cwt	0 1 0
Wood, fit for Ship-building, imported from any British Possession within the Limits of the East India Company's Charter, the load of fifty cubic feet . . . . .	0 0 1
— imported from any other place within those Limits the load . . . . .	0 10 0
Zaffre . . . . . cwt	0 1 0
Goods, Wares and Merchandize, not being either in part or wholly manufactured, not being enumerated or described, nor otherwise particularly charged with Duty in this or any other Act, for every 100 <i>l.</i> of the value . . . . .	5 0 0

*The Effects of Arts, Trades, and Professions, and of civic states and habits of living. on Health and Longevity; with suggestions for the removal of many of the agents which produce disease, and shorten the duration of life.* By C. TURNER THACKRAH, Esq. Second Edition, greatly enlarged. London: Longman and Co. Leeds: Baines and Newcome. 1832. pp. 238.

THE rapid sale of the first edition of this work fully proves the immense interest and importance attached to the prevention of disease by the members of our profession; prevention is better than cure is an old adage, and not less old than true. In the monthly series a very full and ample review was given of the first edition, so much so indeed that we do not intend to go over the same ground again, but to confine our attention chiefly to the new matter, which relates to about 120 employments, which were not examined before. We have often

had occasion to lament that hygiene is not more attended to in this country, but ever the success of Mr. Thackrah, we hope that other gentlemen will be induced to exert themselves in the same, or other departments of that branch of the science of medicine. Mr. Thackrah deserves the thanks of all mankind for what he has done, and should he be inclined to prosecute his inquiries still further, we doubt not but that he will be seconded by every one who has the welfare of his fellow-beings at heart. He has sunk a shaft in a rich and extensive mine, which has hitherto been but little explored, indeed we may almost say, wholly neglected; it is, however, one which will amply repay the zealous and industrious inquirer, not perhaps by gratifying the *auri sacri fames*, but by procuring him that *mens sibi conscia recti*, that assurance of having done well, of not having lived in vain, without which the *argent comptant* cannot afford lasting satisfaction. To a well constituted mind, and one that has thoroughly imbibed the principles inculcated by the ethics of our profession, this inquiry holds out prospects of high satisfaction and pleasure; but we fear that as long as Government does not take up the affair, until the ministry shew that paternal affection to the people they are bound to do, by establishing a *Comité de Senat*, and instituting inquiries on a large scale, the private zeal of a few philanthropic individuals will be of but little advantage; still, however, we urge them onwards, for if, by their efforts, they are enabled to effect even a slight amelioration, we are certain they will feel themselves highly rewarded. It is much to point the sources of ill health from manufactures; it is more to suggest measures for the removal of such sources; but the most glorious work of all is, to effect their abolition. Continued industry will enable an individual to discover the sources; it requires mind to suggest the measures for their removal, but it demands long perseverance, a determination to do good

at whatever expense it may be, it demands the whole soul devoted to the cause, as Howard's was to carry these measures into practice; it requires, as, Gloster observes, although in a different sense, that he should have "the soul and body on the action both." Mr. Thackrah, observes, that "still much, very much, remains to be done: and I would earnestly solicit the profession to aid, extend, and correct these important investigations. If any object, that the cure, not the causes or prevention of disease, is the business of the medical practitioner, I would reply that the scientific treatment of a malady requires a knowledge of its nature, and the nature of a malady is but imperfectly understood without a knowledge of its cause." In every point of view, the question is one of the most important of medical police, and we sincerely hope that it will in future receive that attention which it so richly merits. In regard to Mr. Thackrah, even should he be inclined to remain on his oars now, there is no one but will consider him to have proved himself the friend of his fellow creatures; yet we hope that the work he has so far advanced, he will be induced to prosecute further; he is one of the earliest pioneers into this *terra incognita*, and we hope that he will not cease clearing away the wood, until not only himself, but many others may be enabled to effect a lodgment.

With these preliminary remarks, we now betake ourselves to the gratifying and pleasing task of analysis. For the convenience of inquiry, Mr. Thackrah divides society into five great classes, viz.—1, Operatives; 2, Dealers; 3, Masters, manufacturers and merchants; 4, Men independent of business and labour; 5, Professional men. On examining the state of these, he adverts to the atmosphere they breathe—the muscular exercise they take—the postures of the body they maintain—the variations of temperature and humidity to which they are exposed—their diet

and habits of life; and, finally, in some classes, the state of mind—thus embracing the whole of an interesting and most extensive theme, one which, while it is worthy of the deepest attention, is necessarily one of extreme difficulty, and this arises in a great measure from the complex nature of the inquiry, and also from a certain feeling which tends to induce individuals to resent what they consider to be an invasion of their privacy, and renders them unwilling to furnish details in regard to their own state of health, &c. We know not whether Mr. Thackrah has met with any such obstacles, but we are well assured that such is the general feeling of the lower classes to whom the benefit and utility of such an inquiry are either altogether unknown, or misunderstood.

The first class or operatives, he divides into first—*Men of active habits, and whose employments are chiefly in the open air.*—Of these, the 1st is the husbandman, with whom we shall commence. He is well known to be generally healthy. The chronic maladies of towns are almost unknown in the country, but, on the other hand, epidemic fevers, cholera, diarrhoea, and dysentery, are more severe and perhaps more frequent; indeed the agriculturist is more subject to epidemics than the townsman, which Mr. T. attributes to the purity of the air; considering that the disease is dependant on a natural change in the constitution of the atmosphere, he is of opinion that its effects will be most felt whenever the air is most natural, while in towns it is so largely impregnated with animal effluvia, smoke, the dust, and gases of manufactures and arts, that it can be but partially affected by the addition from without, consequently the townsman inhales but a diluted miasm. With the exception of the labourer's debauch at a fair or feast, or the master after market, they are generally temperate. Longevity is more common than in any other class; in one village in the neighbourhood of the Lincolnshire

fens, containing not more than 120 inhabitants, there are now eight persons nearly 90 years of age. Mr. T. states that in the marshy districts, pulmonary consumption is extremely rare. In the fens, ague has been considerably diminished of late years, by draining; in one district they are not now one tenth of the number of cases there were 20 years ago.

Dray or wherry-men have, in addition to long-continued walking, great exertion in lifting weights. Being well paid, they are generally very intemperate. They complain occasionally of uneasiness in the feet and loins, which appears to depend on the labour they undergo, and of head-ache, and disordered state of the urinary organs, which arise from intemperance. Their habits of early rising and constant exercise in the open air, act however as an antidote to disease, "for they are generally robust, and attain considerable age." From this description it seems evident that Mr. Thackrah cannot allude to the London draymen, very few of whom, we believe, ever reach the age of 56. Carpenters (ship) have full and varied muscular exertion, generally in exposed situations; they generally take grog and ale, when they are to be got, too liberally. They are not subject to any marked disease, save that the hearing is often impaired from the noise of their employ; they are generally long-lived, excepting those who accompany the fleets.

Quarrymen, or stone-getters, have strongest muscular labour; they generally attain considerable age, when they escape accidents so common in their employ.

Soldiers are generally healthy; having good and varied exertion, and being compelled to regularity, cleanliness, and early rising, they are subject to few other diseases than those of the season, hereditary affections, and those dependant on excess previous to enlisting. Drunkenness is now comparatively rare. Mr. T. expresses his surprize that the surrounding townspeople and peasantry are

exempt from the Egyptian ophthalmia, which still exists among the Irish stations, but we think that point fully cleared up by the discovery of the ophthalmia conspiracy, mentioned by Dr. Fergusson. When on actual service, the duties are more severe, intemperance, excess greater, and consequently disease is more rife. Hernia is frequent in the cavalry regiments, which is attributed to the style of riding, and the length of the stirrup-strap; but our author considers that another cause may be found in the weight of the sword, which, instead of being supported from the shoulder, is solely supported by the belt, and this makes a partial pressure on the abdomen. This idea originated with Dr. Blake of Lenton, Nottingham, who pointed out the injurious effects of the sword belt as now worn in producing hernia, and the remedy in a paper headed,—"On the danger of the custom so generally adopted of compressing the abdomen by means of a belt or stays, as tending to the production of Hernia," and published in the London Medical and Surgical Journal, vol. vi. No 36. p. 484. The capacity of the chest in soldiers appears to be considerably more than in other classes. The following anecdote in regard to recruits is exceedingly curious and interesting in a physiological point of view. "It is worthy of notice that those from the poor and ill-fed Irish or Scotch districts, suffer from the sudden change to good diet. Few escape an attack of fever. The lad when taken ill is aware of the cause, and often says, to his medical officer, 'O, Sir, it is the mate that is killing me.' It is observed, that if an Irish recruit, soon after his enlistment, be sent, for any trifling complaint, to the hospital, and there brought gradually through the scale of diet to the full barrack allowance, he escapes the fever." A hint might be obtained from this, by which the disease might be avoided in all cases.

Sailors are hardy and enterprising; those serving on the coast or home station, are generally very healthy

and robust. Life is curtailed by a variety of circumstances, the most injurious being intemperance, night watching; and restrained sailors are more intemperate than soldiers.

2nd. *Those whose employments are carried on in an atmosphere confined and impure.*—Mr. Thackrah prefaces his remarks on individual employments, by stating the effects of a vitiated atmosphere generally; after which he proceeds to detail his experience with regard to tailors; but as these were dilated on in the first edition, we must pass them by for the present. Sail-makers are not so intemperate as tailors and shoe-makers, and life is much longer. They frequently attain the age of 70.

Tobacco-pipe makers, cork-cutters, and stay and geer-makers, are not subject to any peculiar agents of disease. Card-makers have two principal departments; doubling the wire, a duty done by men, who are subject to indigestion, head-ache, and constipation. Card setting is performed by children from 8 to 12 years of age, who suffer from head-ache and pain in the back at first; but they seldom remain long enough at the work for it to develop its effects on health. The rooms in which they work are often far too much crowded. Scribblers and carders of wool have moderate and varied exertion. The labour of the power-loom weaver is light, but the atmosphere of the mill is close, and the rooms are generally too crowded; besides which they are required to be at work at all seasons at six in the morning, and have merely a quarter of an hour allowed them for breakfast, three-quarters for dinner, and a quarter for the afternoon meal; a space of time which is a great deal too short. Cotton-weavers are generally healthy. Silk-weavers are small in figure, and appear half starved; their wages are too low to allow a fire even in the depth of winter. Pulmonary consumption is frequent, and among the females distortion of the pelvis. Weavers of worsted handkerchiefs, fancy goods, and worsted stockings,

are less healthy than cotton weavers, on account of the dust which affects the respiration. Weavers of wire have greater labour than others, and are more robust and healthy. Raisers of cloth, blanket-makers, whip-makers, and stuff and woollen printers, are generally healthy. Engravers are subject to affections of the head, and organs of digestion, but organic disease is not so frequent as in other occupations, as they are less intemperate. The employment affects vision. It does not appear that copper-plate printers are at all injured by their employ, although neither they nor engravers present many examples of old age. Stuff and woollen printers appear healthy. Book-binders and pocket-book makers have remarkably easy work. The latter have high wages, and not being obliged to keep houses, are very dissipated, to which their illness are chiefly attributed. The putrid serum of sheep's blood, which they use as a cement, might very well be exchanged for white of egg or albuminous matter, which does not offend the senses. The turning, stoving, and painting, are the only parts of the work injurious to japanners. Though few die-sinkers complain of ill health, the pallor of the countenance indicates a reduction of vigour in the digestive and circulatory systems. Of workers in gold and silver, we learn that they have good wages, live well, and not generally intemperate. Some parts of the work, such as chasing, hammering, moulting, and pumicing, are more unhealthy than the other. Gold-beaters are exposed to no injurious agent, and enjoying good wages, are healthy and robust. The Englishmen at the burning and grinding factories for plaster of Paris, are generally long lived, and some attain the age of eighty; while the Italians, the greater part modellers, generally die young, and usually from pulmonary consumption. They live chiefly on vegetables; there is nothing injurious in any part of their employ. The grinding and filing processes in cutlery

produce the worst effects on health. Cutlers are generally intemperate and short-lived. Shear-grinders are subject to impaired hearing, from the noise of the machinery, but their employment is no otherwise injurious. Nail-makers are intemperate; their occupation resembles that of the smith, but is more confined. Cabinet-makers, plane makers, shuttle and bobbin-makers, patten-makers and clog-makers, are generally healthy; house-servants rarely so—they are subject to fever; girls from the country suffer more than the natives of a town; kneeling produces the well-known disease, called the housemaid's knee. Footmen, who stand long behind carriages, are said to be subject to hydrocele. Waiters at inns are irregular, dissipated, and unhealthy. They die comparatively young.

3rd. *Those who pursue employments which produce dust, odour, or gaseous exhalations.*—These Mr. Thackrah subdivides into those in which the vapour, odour, or dust, is not apparently noxious; those in which it appears to be even beneficial, generally or partially; and those in which it is decidedly injurious. In the first subdivision we find starch-makers, wire-drawers, rectifiers of spirit, and men engaged in spirit and wine-vaults, who, however, there is reason to believe suffer from the effects of intemperance; varnish-makers, brick-layers, their labourers, lime-workers, leaders of lime, plasterers, white-washers, stencillers, wool-sorters, turners, makers of bone and pearl buttons, bleachers, bronzers, tobacco-manufacturers, and snuff-making, &c. The second, or that where the vapour, &c. is beneficial, we find rape and mustard-crushers, brush-makers, grooms and hostlers, who mar the good effects of their employ by intemperance; glue and size-boilers, comb-makers, buckram-manufacturers, tallow-chandlers, soap-boilers, who, during the plague, were remarkably exempt from it; tanners, said to be as fully exempt from consumption; nightmen, slaughtermen,

butchers, and knackers. We have next the third subdivision, namely, those in which the vapour, &c. is decidedly injurious; and these are, flock-dressers, who are subject to considerable dust, which injures both respiration and digestion; to obviate the injury resulting from the dust, Mr. T. recommends the use of machinery, or the admittance of free currents of warm air to the operatives. Shoddy-grinders are likewise subject to dust, which produces cough and expectoration; it causes in beginners, headache, sickness, dryness of the fauces, and difficulty of breathing, a complaint lasting about six or eight hours, and termed the "shoddy fever." Weavers of coverlets, and of harding, preparers or dressers of hair, dressers of Spanish or coloured leather, of hemp, and japanned goods, and coral-grinders, are more or less subject to dust, which has a noxious influence on the respiratory organs, so much so, that the operatives cannot continue for any length of time at some of these employments; masons are subject to a similar annoyance from sand and dust, in addition to which they are addicted to intemperance; consequently they are short-lived, generally dying before forty. Colliers are subject to the inhalation of coal dust and pernicious gases, as the carbonated, and sulphuretted hydrogen, and carbonic acid gas. They are also subject to sudden outbreaks of water, and various accidents. They suffer from disorders of the head, muscular pains, particularly in the back, rheumatism, asthmatic and other disorders of the respiratory apparatus. Their complexion is sallow and unhealthy; eyes affected with chronic inflammation, and intolerant of full light. The use of the safety-lamp, examination of the state of the air, especially in pits re-opened, and the practice of ventilation, would prevent many of those accidents to which they are liable. Iron-miners are in nearly similar condition with colliers. Lead-miners suffer considerably from their em-



ploy, and more by working the ore in sand-stone than in lime-stone, as the latter allows the water to percolate through it, and thus lays the particles of dust. They rarely work more than six hours a-day, yet seldom attain the age of forty. They are very intemperate, confessedly to drown the idea that they are doomed to premature disease. Last year there were in the village of Arkendale (in the heart of the mining district,) not less than thirty widows under thirty years of age. Mr. Thackrah inquires, "would the inspiration of dilute chlorine for an hour in an evening, so invigorate the constitution as to enable it to resist the invasion of disease?" Fork-grinders who use a dry grindstone, die at the ages of twenty-eight and thirty-two; the table-knife grinders, who use a wet stone, live to forty and fifty. They fall victims to slow but certainly fatal consumption. Mr. T. re-echoes the recommendations of Dr. Knight on this subject, which are, 1st, dusting the machinery before the work commences; 2ndly, great reduction in the time of labour; 3rdly, use of wet stones as much as possible; 4thly, large flues to be laid on the floor for ventilation, and currents of air to be forced through them by the machines; 5thly, fork-grinding to be confined to animals. The employment of file-cutters is allied to that of grinders, but not so noxious. Among the makers of fire-arms we find the intemperate chiefly suffer. Brass-founders and braziers suffer from the inhalation of the volatilized metal. In founding yellow brass, the evolutions of oxide of zinc is very great; it immediately affects respiration, less directly the digestive organs. Brass-melters are subject to an intermittent fever, which they term brass ague. The hair of the head of the filers turns to green, which Mr. T. attributes to the oil of the hair combining with the copper in the brass particles. The manufacturers of white lead are sallow and thin, and complain frequently of

head-ache, and loss of appetite. The effects of lead are most perceivable in the white beds and packing departments. The oldest man known in a large establishment at Hull, was found to have attained the age of fifty-four, when he was unable to work. He had been employed sixteen years, and during that time was laid twenty-eight times from serious disease! Each attack worse than the predecessor. "He has been on one occasion nineteen weeks in bed, with scarcely the power of stirring a limb, and was a month without an evacuation from the bowels. This miserable man is now partially paralytic; he has scarcely any motion in either wrist, and his lower extremities are so weakened that he can scarcely trail himself along, even with the aid of a crutch. His haggard countenance and emaciated frame give the appearance of the age of eighty rather than of fifty-four." No person can be a month in the worst department without a serious attack of disease. Mr. Thackrah recommends great cleanliness, the use of a linen dress, the rooms to be spacious and well ventilated, with a strong draught through the furnace, a subsidiary chimney on the plan of Dr. Christison, and not allowing the men to take their meals in the workshop, as means of prevention. Fatty aliments are recommended as preservatives against the poison of lead. Paper-stainers suffer chiefly from rubbing and grinding the paint. There are few instances of aged paper-stainers. Several of the occupations of the makers of military ornaments are injurious, but the operatives are not confined to any one process. They are generally temperate. When metal spoon-makers are temperate, they enjoy health, and attain full age. The metals used do not induce any form of paralysis. Metal and iron button-makers suffer from gastric affections, but chiefly from irritation of the air-tube, and its consequences. The gilt button-makers are mostly affected by the mercurial va-

pour, they seldom live to full age. Men who silver mirrors are subject to the mercurial vapour, which produces difficult enunciation, pain and constriction at the base of the chest, emaciation, debility, tremours, and salivation. The gums are often wasted, and the teeth left loose in the socket. Few can bear the employ for a long time. Water-gilders are also subject to the mercurial vapour, but they diminish its effects by a piece of glass between the mouth and the material, or a long proboscis which hangs below the vapour. When tremours appear, rest, fresh air, and aperients should be promptly employed; and for salivation, iron is the best remedy. Jewellers and workers in gold are exposed to the effects of various gases. They are very intemperate, and dram-drinking is especially prevalent. An old jeweller is worthless to the art. "A master observes, that 'the men drop off from work unperceived, and disregarded. I am quite at a loss to know what becomes of them. When they leave off working, they go and are seen no more. Some, perhaps, become applicants for charities; but so few have I known of the ages of 60 or 70, that leaving work, they seem to leave the world as well, a solitary one appearing at intervals to claim some trifling pension, or seek admission to an almshouse.'" Asthmatic persons cannot bear the employ of makers of sulphuric and nitric acids, and of sulphate of magnesia, as the acid fumes cause cough and tightness of the chest. Aged workmen are found in the manufactories. The bleachers of worsted articles are exposed to the effects of sulphurous gas; they are habitually subject to cough, and their sallow complexion indicates ill-health.

Mr. Thackrah, on reviewing this section, adds the following remarks:—1st, Dust is the great bane of manufacturers, and whether it be farina, animal or vegetable fibre, or evolved from minerals, stone, lime, coal, or metal, it injures the respiratory or-

gans, in proportion to the mechanical irritation it induces on the bronchial membrane. 2ndly, The gases of manufactures affect the respiration of the men, only when applied in an extraordinary degree, and seldom do permanent injury, unless this strong application be long continued. To this remark, the volatilization of lead, mercury, and some other minerals, form the principal exceptions. 3rdly, The digestive organs form an artificial atmosphere, and, except in the dusty occupations, seem to be sooner affected than the respiratory. 4thly, Animal decomposition, however disgusting to the senses, does not injure those who are continually exposed to it; but, on the contrary, appears very considerably to invigorate the constitution."

4thly. *Those who follow occupations which injure or annoy by acting on the skin.*—Potters suffer the usual effects of lead, from immersing their hands in a strong solution which is used for "glazing." The intemperate suffer most. It is very desirable that some substance be found which can replace the lead. Its chief recommendation is said to be its comparative cheapness. Grocers are subject to a variety of impetigo or eczema, from having their hands frequently in sugar; bakers to a variety of psoriasis from the flour. Mr. Thackrah considers farmers liable to absorb the poison of glanders from the diseased horse. He urges the necessity of plastering any wound on the hand, and when it has been neglected, washing immediately after touching the diseased animal, and applying a drop of nitric acid to the sore on the hand, will, he thinks, diminish the chance of absorption.

5thly. *Those whose occupations expose them to wet and steam.* These are scourers of wool, dyers, brushers of cloth, of steam, fullers or millers of cloth, giggers, hatters, brewers, and paper-makers, none of whom appear to suffer any ill effects from the exposure. In his comments on this, Mr. Thackrah says, "I would urge my conviction that in nine-tenths of

these diseases (those said to arise from exposure to cold) wet or cold is no more the cause, even the exciting cause, than Tenterden steeple of Goodwin sands."

6thly. *Those exposed to a high temperature, or to great variations of temperature.*—Sugar-refiners are generally Germans, Englishmen not being able to bear the heat; they work sometimes in a temperature of 120°. They are healthy, and remarkably muscular, but are said to be worn out or die consumptive before the age of fifty. There are many other occupations described by Mr. Thackrah, but they tend to prove that the human frame can bear a high degree of temperature without injury. Mr. Thackrah draws the following inferences from his observations:—

1. That operatives habituated to high temperature daily feel effects similar to those felt by persons who occasionally place themselves in this temperature. Habit seems to have little power in rendering the body insensible to heat. The men daily have an excitement of pulse, perspiration proportionate to the degree and continuance of the heat, and its complication with muscular labour, thirst and languor. The complexion is rendered pale, and the digestive functions are impaired; in all, the tongue is milk white.

2. Persons exposed by their labour to great and frequent variations of temperature, are not more subject to inflammation of the lungs, or of the bronchial membrane, to pleurisy of fever, than other men. Even the founders and dry-house men, who, many times a day, make sudden transitions of temperature, equalling often 100° or 120°, are neither sensible of inconvenience at the time, nor subject to pulmonic disorders.

3. Affections termed rheumatic are, I think, frequent in this class. If the exciting cause of such complaints be referred to great and sudden changes of temperature, may not the predisposing cause be attributed to the unhealthy state of the abdominal

viscera, induced by the excessive potation of fermented liquor?

4. Though the digestive functions are impaired, and the muscular power reduced, organic disease does not speedily result. Men working in high temperature are not often incapacitated for work.

5. Adults bear heat better than the young.

6. Do not employments especially require a nutritious diet? This appears to be the case in reference to some of the manufactures lately noticed. Cotton-spinners, for instance, are said to require more and much better food than husbandmen.

7. Is life shortened by 'habitual exposure to great heat? I think not. Though the operatives of this section do not live as long as husbandmen, they do not, on the whole, appear to be shorter lived than the bulk of townsmen.

The remedies which may be suggested for the evils referred to in this section are—

1. Diminution of the muscular labour which is performed in hot rooms. Raising the iron tender-frames in the dry house ought to be effected, and the hot plates of the stuff-pressers conveyed by machinery. These, and similar modes of relief, are more worthy of mechanic ingenuity than most of the ends to which this ingenuity is devoted. The men, however, should be less active, and carry lighter weights. In other countries, heat is considered a sufficient cause for the reduction of labour; while in England, operatives employ all their strength, as well in a temperature equal to that of the tropics, as in the open air of our winters. 2. The drinking lemonade, or other diluents, during the time of labour, rather than the noxious compound called ale. 3. The use of stimulants with the food, after labour. 4. The reduction of the period of labour."

(To be continued.)

THE

**London Medical & Surgical Journal.**

Saturday, Aug. 25, 1832.

## MEDICAL REFORM.

IN no civilized country in the world is the medical profession so neglected by the government, its members so divided amongst themselves, its value so depreciated, its constitution so imperfect, the laws relating to it so contradictory, so oppressive on its legitimate members, or so useless for the conservation of public health, as in Great Britain and Ireland. The truth of this position is incontrovertably proved by reference to the history of medicine at the present period, and by the following facts, which no man can question. In the first place, it is to be recollected that the study of anatomy, the basis of medical science, is now legalized, for the first time, in this country. In the next place, the medical profession is unrepresented in the British legislature, while the professions of law and divinity constitute a formidable proportion of our Parliament. However honourable and useful these professions may be, we must contend that medicine is as dignified, and infinitely more important to humanity. This has been admitted by mankind from time immemorial; the opinion is universal that health is the greatest temporal blessing that has been conferred on man. Well might one of our best sentimentalists exclaim,—“ O blessed health!

thou art above all gold and treasure; 'tis thou who enlargest the soul—and openest all its powers to receive instruction and to relish virtue. He that has thee has little more to wish for! and he that is so wretched as to want thee—wants every thing with thee.” The pre-eminence of the healing art was admitted by the heathen and christian philosophers, and by the greatest orators and moralists. Cicero said, “ in nulla re homines propius ad deos appropinquant quam salutem hominibus dando;” while Seneca observed, “ quaedam pluris esse quam emuntur; emis a medico rem inestimabilem vitam ac valetudinem bonam.” Medicine was rendered pre-eminent by having been practised by the Divine Redeemer, who avoided all other human pursuits. It was encouraged, cultivated, and practised by kings, princes, and pontiffs, the highest, wisest, and best of men. All civilized nations conferred the greatest honours and privileges upon its practitioners—they were exempt from the performance of civil duties—the highest rank and the most ample rewards were bestowed upon them. In no country has the medical faculty received more respect than in this, and at no period of our history has more patronage been extended than by our gracious and benevolent Sovereign, whose encouragement of literature, the arts and sciences have been unequalled by all his predecessors since the days of Alfred. Nevertheless the medical profession has been, and is still, neglected by our government and legis-

lature. The laws relating to its practice are a disgrace to the statute book—they establish five different medical corporations in England, five in Scotland, six in Ireland, and every one of these with distinct rights and privileges. We have University opposed to University, Colleges of Physicians and Surgeons opposed to rival institutions, and Companies of Apothecaries as belligerent as may be desired; while the public health is destroyed to an incredible extent by ignorant pretenders to medicine. It was truly observed, by one of the greatest physicians of whom this country can boast, that “quackery has destroyed more than the sword, famine and pestilence united;” and never was there a period in British history in which it is so luxuriant as in this age of intellect. It therefore follows that the laws relating to the practice of the medical profession in these countries, are not effectual for the preservation of the public health. Nevertheless, those laws were enacted for the restraint and suppression of empiricism—a species of imposture tolerated in no other European nation. The Royal College of Physicians, and the Apothecaries’ Company of London, and, according to Willcocks, the Royal College of Surgeons,\* possess ample power to abate this monstrous evil, but, strange to say, they neglect the interests of the profession and of the public. It is only justice to these bodies to add,

that the sanction given by the government, Whig and Tory, to quackery, neutralizes their exertions. In proof of this position, we need only state, that the stamp duty on patent medicines alone amounted to £.30,000, in England, in 1831; the sum derived from Ireland and Scotland was not included, neither was the immense revenue on newspaper advertisements for quack nostrums and quack puffs taken into account. The real amount of revenue on quackery in the United Kingdom, may be fairly estimated at £.100,000 a-year. Here then is the secret influence which paralyzes the Colleges. It is a great insult to the educated professors of medicine, and to the framers of our pharmacopæias, to allow ignorant and illiterate persons to take out patents for what they allege as infallible cures for incurable diseases. Quack medicines are disgraceful to the profession, injurious to health, and often destructive to life. But a preponderating proportion of the public are captivated and convinced by newspaper advertisements, for the shallow-minded, who form nine-tenths of society, take for granted that the most incredible puffs are true, purchase patent medicines, and commit their health and lives to the care of ignorant, unprincipled, and desperate empirics. In former times, when the legitimate medical practitioners were comparatively few, there was some ground for tolerating empiricism, but heaven knows there is no lack of the faculty at present, as we believe there is no part of this kingdom in which edu-

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\* *Treatise on the Laws relating to the Medical Profession.* 1830.

cated practitioners cannot be consulted. "But now," says Professor Cooper, in his excellent and classic *Hunterian Oration*, "when this disadvantage" (the paucity of medical practitioners) "no longer exists, we find the noble and opulent voluntarily coming forward in courts of justice, as the patrons and dupes of murderous quackery, and in opposition to all common sense and decorum, spontaneously selecting the felonious charlatan as the fit object of their protection and confidence.

"When I join with such occurrences the present state of the laws of this kingdom, as having a decided tendency to promote the silent, but extensive havoc of quackery, and to discourage the study of anatomy—the principal foundation of every thing that is good, safe, and useful in the practice both of medicine and surgery—I can hardly bring myself to believe that such things could have happened in a country proudly exalted amongst nations by its love of science, its attachment to truth, and its contempt of mercenary ignorance. The laws, which give rise to circumstances, leading to the robbery of graves, and even to the murder of the living for the sale of their bodies, must be bad indeed; but the laws, which would totally interdict the study of anatomy, and leave the whole community a prey to those all-devouring monsters, Disease and Quackery, must be infinitely worse."\*

If the practice of medicine, as is generally supposed, consisted merely of certain prescriptions, more or less proper to combat, to alleviate, or to remove diseases, it would not deserve the high praises bestowed upon it by society; but those who understand it have discovered that its empire is boundless, and that none of the human sciences is so interesting, so important, or so valuable to mankind.

The science of medicine is vast, almost beyond the comprehension of any man; it comprises nearly all the branches of natural science, directly or collaterally; the study of every one of which would occupy the life time of any man; besides the study of the most complicated, and perfect machine in the creation—the body of man, with its uses, the innumerable derangements, and remedies afforded by the various ranges of creation. Hence the study of medicine requires a much greater exertion of the intellectual faculties than any other science. Innumerable are the causes which derange the human body, and innumerable our diseases and remedies.

Mille mali species,

Mille salutis erant.

Medicine has been admitted by all men of learning to be the most abstruse and extensive of the sciences, and yet any illiterate charlatan may attempt it with impunity, and the nobility, legislators, and community, are ready to aver that he, by one remedy, can cure all diseases. We, on the contrary, observe venerated teachers grow old in the study of a single branch of our science, without ever

\* The Hunterian Oration, delivered in the Theatre of the Royal College of Surgeons in London in 1832. By S. Cooper, Professor of Surgery in the University of London, &c. Longman and Co.

imagining that they have explored the whole field, which they have so ardently and so assiduously cultivated. No, it is the audacious quack who can comprehend the whole, and who can procure the nobility and gentry of the greatest nation on earth in learning, science, art, and affluence, to confirm his empty and impudent pretensions, and to outrage common sense and reason. But we ought not to be surprised at this, as the medical profession wages war with itself, and is nothing but a rope of sand. Our physicians are at war with our surgeons—the surgeons equally pugnacious, and the apothecaries, mindful of the fable of the oyster, successful against both. Amid such strife and discord, we cannot be surprised that the pretenders to medicine should reap a golden harvest. Divide and conquer, is a Machiavelian principle, which is as fatal to medicine as it has been to politics. If the different medical corporations were united in their efforts and exertions, empiricism would be extinguished, and the noble science of medicine would be triumphant. But every one of our corporations, medical, surgical, and pharmaceutical, is highly culpable, and every one of them needs improvement. Such was the state of medicine in France when Napoleon became Emperor; but he speedily changed the entire system, and so modified it, as to afford an example worthy of adoption by all countries. It is gratifying to think that a new charter has been given to the British nation, and that all defects, abuses, and absurdities in

our laws cannot continue any longer. It is impossible that the present antiquated state of the law, respecting the practice of medicine, can remain unchanged, or that a reformed House of Commons will be so short sighted as not to perceive that the practitioners of a science so pre-eminently important as our own, shall not have every facility afforded to them of conferring upon all classes of society the inestimable advantages of preserving health and life. The time has arrived when health and life must be more highly estimated than property, and when legislation must be based upon this principle. Every man prefers health and life to wealth, and these will, shall, and must be efficiently protected.

We can confidently assure our readers, on authority which cannot be doubted, that a complete reform in the medical profession will very speedily take place.

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#### THE CHOLERA.

*Council Office, Whitehall, Aug. 22.*

NEW cases, 1,179; died, 104; recovered, 580; total cases from commencement, 36,235; total deaths from commencement, 13,405.

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#### CENTRAL BOARD OF HEALTH FOR IRELAND.

*Council Office, Dublin Castle, Aug. 17.*

REMAINING at last report, 359; new cases, 33; died, 5; recovered, 37; remaining, 350; total cases from commencement, 9,676; total deaths from commencement, 2,758.

## COMPARATIVE MORTALITY.

A CURIOUS official paper has been circulated, ordered by the House of Commons, shewing the comparative mortality in many large towns, &c. of the kingdom, from 1813 up to the present year. Among the towns included in this comparative calculation of mortality are, Leeds [town], Bradford, Holbeck, Beeston, Wigan, Preston, Norwich, Bolton-le-Moors, London, Bury [Lancashire], Essex, &c. The result of the investigation of mortality may be concisely stated as follows:—Of children born there die, in Leeds, 53 per cent. under 5 years of age, and 62 per cent. under 20 years of age; in Bradford, 47 per cent. under 5, and 59 per cent. under 20 years of age; in Beeston, 39 per cent. under 5, and 52 per cent. under 20 years of age; in Holbeck, 50 per cent. under 5, and 62 per cent. under 20 years of age; in Norwich, 42 per cent. under 5, and 50 per cent. under 20 years of age; in Wigan, 48 per cent. under 5, and 59 per cent. under 20 years of age; in London, 38 per cent. under 5, and 46 per cent. under 20 years of age; in Rutland, 29 per cent. under 5, and  $37\frac{1}{2}$  per cent. under 20 years of age, &c. It further appears, that in Essex, Rutland, and the Metropolis, persons live to an advanced age in a greater extent than others.

## NORTH LONDON HOSPITAL.

WE are extremely happy to notice that the Council of the London Uni-

versity have at length determined upon establishing a hospital in connexion with their valuable institution. The munificent donation of £.100 by that philanthropic and independant physician Dr. Harrison, while the Lord Chancellor, the Duke of Somerset, &c. gave but half the sum, affords the best proof of the disinterestedness and humanity of our profession.

## CROTON OIL IN CHOLERA.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

SHOULD the following statement appear to you of sufficient importance for a place in your excellent Journal, you will much oblige me by giving it insertion; its object is to recommend a remedy which has proved decidedly successful in spasmodic cholera, and which in conscience I feel myself bound to make known, although it brings me reluctantly before the public.

On Wednesday the 18th July, I was seized with a slight diarrhœa, which continued and increased on the day following; the matter discharged was passed without pain, so that I was thrown off my guard as to the nature of the complaint; towards evening of the second day I became restless and feverish; at midnight my pulse was 120, and very weak; spasms in my legs and arms led me to think for the first time that I was labouring under spasmodic cholera. On examining the copious flowings from the bowels, I found them consist of a limpid fluid resembling chicken broth or barley-water: this is now understood to be the serous part of the blood; when this escapes, only the thick dark particles remain in the blood-vessels, which soon become stagnant and occasion death. This was nearly the case with me, as



the pulse had become almost imperceptible, and the dark streaks in the lines of the veins, and the colour of the skin, denoted that the state of collapse was fast approaching. The question then was, can a new action be produced in the intestinal canal? Yes, I said, it is possible, and I will try that remedy which I have so strongly recommended to others in this disease. I took three drops of croton oil on a little sugar, and confidently waited the effects. The following took place in succession:—In 20 minutes the stomach was discharged of an immense quantity of undigested food; the liver, which had been distended to a most painful degree with bile, poured its contents into the intestines; the gruelly discharge from the bowels was now succeeded by copious evacuations of bile and offensive matter, the cramps ceased, and the pulse rose. All those favourable occurrences took place in less than an hour after taking the croton oil, and I pronounced myself out of danger. This is my case, and I hope and trust it may prove an important one to the public, as it may lead to a more successful mode of treatment than has hitherto been employed in this fatal disease.

Ever since the appearance of the Asiatic cholera in this country, I have not ceased to urge the employment of croton oil to my professional brethren, and even to the Central Board of Health—but in vain, for I have never yet heard of its being resorted to. I was induced to recommend it from the decided success I witnessed of its utility in yellow fever and other diseases in the West Indies, bearing a strong resemblance in many of the leading symptoms and appearances after death to those of the epidemic cholera. My reasoning heretofore was from analogy; but the practical facts detailed in my personal case confirm the strong impression on my mind that the croton oil will prove an invaluable remedy in spasmodic cholera. I have now discharged a duty which I owe to the public in

recommending what I conceive may turn out a benefit to mankind.

I have the honour to be,  
Gentlemen,

Your most obedient servant,  
EDW. TEGART.

Inspector-General Army Hospitals.  
Bryanstone-street, Portman-square, Aug. 10, 1832.

[We have been informed, on the most respectable authority, that croton oil and calomel have been found highly beneficial in cholera.—EDS.]

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EXTRAORDINARY CASE  
OF  
LITHOTOMY.

ONE THOUSAND CALCULI IN THE BLADDER.

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In our last Number we stated that the operation of lithotomy had been performed upon the venerable Chief Justice of the United States by our esteemed collaborator, Professor Physick, and that the patient was doing well. We have now the gratification of announcing the complete success of the operation, and of communicating the following particulars, with which we have been politely furnished, of the case.

Between two and three years since, Chief Justice Marshall, whose age at present is about seventy-six years, began to experience uneasiness in voiding his urine, which soon increased to severe pain whenever he discharged it. Walking quickly, or any sudden motion of his body, occasioned him much pain, and riding on horseback not only had the same effect, but caused his urine frequently to be tinged with blood.

On the 29th of September last he consulted Dr. P. respecting his complaint, and submitted to the necessary examinations. A bougie of full size passed easily into the bladder; which proved that no obstruction existed in the urethra. The state of the prostrate gland was next examined in the usual way: this was found to be somewhat enlarged, and three hæmor-

rhoidal tumours were noticed—they were free from pain, nor had they for a considerable time caused any inconvenience. On the following day a common sound was introduced into the bladder; at first no stone could be felt, but by moving it in such a way as to cause its extremity to pass to the left side of the bladder, a calculus was found, and the noise from the stroke of the end of the sound against it was distinctly heard by those present at the time.

As the calculus had only been felt when the end of the sound was passed to the left side of the bladder, it was determined to vary the position of the patient's body, to ascertain whether the situation of the stone in the bladder could be changed in that way, but in every position it could only be felt when the end of the sound was passed to the left side of the bladder. These trials induced a belief that the stone had in some way a fixed position in the cavity of the bladder. On inquiry, it was found that he had never voided any fragments of a calculus, or any small stones until the day before his arrival in Philadelphia, when he noticed a small, smooth stone discharged with his urine, of the size of a common pin's head. This was the only one he had ever voided with his urine, though that fluid was always discharged in a full stream.

The operation of lithotomy being determined on, was performed on the 13th day of October last, in the usual manner. After dividing the neck of the bladder with the gorget, a finger being introduced into the wound, the body of the prostate gland was found considerably enlarged, and the third lobe projected upwards, forming a tumour of the size of the end of one of the fingers.

The finger not being long enough to reach into the cavity of the bladder through these tumefied parts, it was impossible to feel the stone; a pair of forceps, moderately curved, were next introduced, on withdrawing which, the doctor was surprised to

find that instead of a large stone he had only removed a number of small ones, which he at first supposed to be fragments of a large calculus, broken by the grasp of the forceps. On examining attentively the pieces removed, he found they were not fragments, but each of them was a separate stone, with a very smooth, polished surface, from which a small projection arose, and on some of them two or more of these projections, at the extremity of each of which a small depression or hole was noticed passing into the stone a little way. The operation was completed by extracting these small calculi with forceps, and by injecting barley water to wash out any that might escape the forceps. It was estimated that more than one thousand of these small calculi were extracted. They varied much in size from that of a large pea to that of a pin's head, and being analyzed by Professor Hare, were found to be composed of uric acid. The Chief Justice bore the operation with uncommon fortitude and patience, not making any exclamation during the whole process.

The symptoms consequent to the operation were mild, and we had the pleasure to see his cure completed in less than five weeks, when he was able to return to Richmond, and to resume the duties of his exalted station on the bench. It is believed that each of these small stones was attached by a small fibril to the surface of a tumour growing out from the left side of the neck of the bladder, and entering the small depression noticed on the little projections above-mentioned. Had they been loose in the bladder, some of them must, we presume, have passed out with the stream of urine.

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#### CAPRICES OF THE HUMAN APPETITE.

THE human being has been described as an animal capable of suiting himself to every description of climate,

ranging from the pole to the equator, and of adapting his habits either to those of savage life, or the highest state of refinement. His power of enduring a temperature which would freeze the blood of an alligator, or melt the body of a bear, is not more remarkable than the variety of food which he can digest, and the perfect power which he possesses of suiting his appetite to the different products of the animal and vegetable kingdoms. In the selection of food he is more governed by caprice and fashion, than the excellence of the repast; and the perversity of taste in this respect is really astonishing. We are informed by Tacitus that there was a man at Colonia Agrippina, whose favourite dish was spiders, and various tribes in the ancient world are noticed as having lived on a species of soup made of snakes and scorpions. Some barbarous nations in modern times feed on locusts, fresh or pickled, while the inhabitants of Madagascar are said to prefer them to the finest fish. But what must we say of the Cochin Chinese, who esteem rotten eggs, as one of the greatest delicacies, and so far do they carry this desire, that putrid eggs are rated thirty per cent. higher than fresh ones? This taste, however, need not excite so much surprise, when we recollect that the upper classes in this country prefer putrid to fresh game, and would not taste it till it acquired the fashionable *gout*. It is a standing joke against the French that they dress and eat frogs, and yet I have seen Frenchmen, who were partial to those reptiles, sicken when they saw rook or crow pies in Scotland.

A story is told of a British sailor who could swallow and digest clasp or pen-knives, sometimes pouring half a dozen into his stomach at a time; and by which freak he ultimately killed himself. Perhaps it will be considered nearly as strange, when I mention, that the Chinese gentry are passionately fond of *birds' nests*—the real nests of birds of the swallow species. This fancy for

birds' nests obtains all over China, but can be followed up only by the very wealthiest classes. Such is the extraordinary demand for this description of food, that its cost is enormous; and to say in China that a man eats birds' nests, is equivalent to saying that he is a grandee or a person of great opulence. The nests which are thus in such repute are not formed of clay, like those of our swallows, but are made of a substance resembling isinglass in appearance, which is understood by some to be gathered by the animal from certain marine matter. Mr. Crawford, in his valuable work on the Eastern Archipelago, presents us with some interesting details relative to these nests, worthy of notice.

“The birds' nests (says he) are those obtained in deep damp caves, and such as are taken before the birds have laid their eggs. The coarsest are those obtained after the young have been fledged. The finest nests are the whitest, that is, those taken before the nest has been rendered impure by the food and *faces* of the young birds. They are taken twice a-year, and, if regularly collected, and no unusual injury be offered to the caverns, will produce, very equally, the same quantity, being very little, if at all, improved by the caves being left altogether unmolested for a year or two. Some of the caverns are extremely difficult of access, and the nests can only be collected by persons accustomed from their youth to the office. In one place the caves are only to be approached by a perpendicular descent of many hundred feet by ladders of bamboo and rattan, over a sea rolling violently against the rocks. When the mouth of the cavern is attained, the perilous office of taking the nests must often be performed with torch light, by penetrating into the recesses of the rock, where the slightest trip would be instantly fatal to the adventurers, who see nothing below them but the turbulent surf making its way into the chasms of the rock.

"The only preparation the birds' nests undergo is that of simple drying, without direct exposure to the sun, after which they are packed in small boxes. They are assorted for the Chinese market into three kinds, according to their qualities. The common prices for birds' nests at Canton are, for the first sort, no less than 3500 Spanish dollars the picul, or 5*l.* 18*s.* 1½*d.* per pound; for the second, 2800 Spanish dollars for picul; and for the third, 1600 Spanish dollars. From these prices it is sufficiently evident that the birds' nests are no more than an article of expensive luxury. They are consumed only by the great; and, indeed, the best part is sent to the capital for the consumption of the court. The sensual Chinese use them under the imagination that they are powerfully stimulating and tonic; but it is probable that their most valuable quality is their being perfectly harmless. The people of Japan, who so much resemble the Chinese in many of their habits, have no taste for the edible nests; and how the latter acquired a taste for this foreign commodity, is no less singular than their perseverance in it. Among the western nations there is nothing parallel to it, unless we except the whimsical estimation in which the Romans held some articles of luxury, remarkable for their scarcity rather than for any qualities ascribed to them. The whole quantity of birds' nests exported from the Indian Archipelago is estimated at 242,400 lbs., worth 234,290*l.* The value of this immense property to the country which produces it, rests upon the capricious wants of a single people. It is claimed as the exclusive property of the sovereign, and everywhere forms a valuable branch of his income, or of the revenue of the state."—*Chamber's Edin. Jour.*

## A SURGEON CONVICTED

FOR NOT

## REPORTING CHOLERA CASES.

On Wednesday last, Mr. Grierson, of Warrington, surgeon, appeared before the magistrates at a Petty Sessions on summons, to answer to an information laid by the Hon. and Rev. H. Powys, as Chairman of the Warrington Board of Health, for refusing to make returns of cholera patients under his care. Only one charge, that of a person named Smith, was gone into, though there were several against him. Mr. Grierson defended his conduct on the ground that he had not been admitted to the same privileges as the other medical members of the Board, and as several medical gentlemen had seen Smith after he had, he expected they had reported the case in question, as they had previously done so with several others. Some of the medical men had asserted that his cases had all died, and on that account he wished a scrutiny into them. He complained of the conduct of the Board towards him, which was his motive for refusing to report them.

Mr. G. also said that he had attended gratuitously more poor people than the rest of the medical men, and he hoped the Bench would therefore act leniently towards him. Mr. Glazebrook, Secretary to the Board of Health, and the Rev. H. Powys, defended the conduct of the members of that Board. The Bench hoped that Mr. Grierson would promise to report; the Rev. H. Powys at the same time stated that he did not wish the other cases to be brought forward. The one in question had been entered into for the benefit of the inhabitants of the town, and he trusted that Mr. Grierson would see the necessity of complying. Mr. G. accordingly promised to report in future, and the magistrates convicted him in the full penalty, £5.—*Macclesfield Courier.*

**Hospital Report.**

## ST. THOMAS'S HOSPITAL.

*Operation for a new Lip, after successful Taliacotian Operation.*

GEORGE DOUGLASS, the undaunted hero, who our readers will recollect, underwent the taliacotian operation, again appeared in the operating theatre on Friday the 17th of August, for the purpose of having the lower part of the countenance improved, viz. by the formation of a new lip, which we stated in a former Number was necessary, in consequence of the contracted state of his mouth from disease, the result of which destroyed his nose. He was apparently regardless of the operation he was about to undergo, or else had been so much benefited by the scalpel, that his sensitive system had become habituated to it. The operation was performed by Mr. Green, in the presence of Mr. Travers, Mr. Key, Mr. Adams, Mr. Mac Murdock, &c. as well as several students. The lines of demarcation were marked out previous to his entering the theatre, which represented two parabolical figures, one of which was situated on the lower lip, the other extending from the symphysis of the chin, to within an inch of the os hyoides, the base of the former being above, the latter below. Mr. Green commenced by making his incisions on the marked line of the chin, before mentioned; he then dissected out the integuments, taking care to leave some muscular fibres, together with as much mucous membrane as possible; the incisions were then extended to the angles of the mouth; the integuments cut away, taking the same precaution to leave the mucous membrane; several small arteries which had been divided were secured by twisting these vessels, then with a double hooked tenaculum, pulled forward the mucous membrane from each corner of the mouth, so as to place it on these fresh cut surfaces

and retain it there by means of the plated pin suture. This being done, the other figure was incised in a similar way, and the integuments dissected up, twisted to the left side, and placed on the former cut surface; the hæmorrhage that again occurred from the cut surface, was stopped in the same manner as before. The edges of this fresh and last wound were then approximated, and retained in that situation by three plated tin sutures. The twisted flap, which exactly corresponded with the first cut surface, was secured in its new situation by seven of the same sutures, four being on the right side, and three on the left, which Mr. Green said were to remain in for twenty-four hours, providing they did not produce much irritation before that time had elapsed; if they did, they were to be withdrawn. The operation, which lasted from half past one P. M. until twenty minutes to four, was performed with the usual coolness, presence of mind, and dexterity of the operator, without even a groan or flinch from the patient, but who remained the whole time of the painful operation, almost as if devoid of feeling. There is no doubt from the favourable appearance of the parts since the operation that he will regain, and enjoy the use of those once destroyed parts, which he so fully merits for the suffering he has undergone.

\* \* \* The new nose looks remarkably well. It appears by our notices to correspondents, that this brave fellow, did not sail with Captain Parry as reported to us.

**PULSATION.**—The pulse, in the time of Hippocrates, was probably not more than sixty beats in a minute; from which probably originates our smallest division of time, denominated the moment or second, which divides the day into 86,400 parts. As the human species refine, probably the pulse quickens; and so completely are we machines, that, like a clock, the faster we go, the sooner we are down.—*Gardiner's Music of Nature.*

## PAROCHIAL BOARDS OF HEALTH.

APPLICATIONS being daily made to the Privy Council, requesting information as to the proper mode of forming parochial Boards of Health, the following instructions have been issued upon that subject:—

“ Council Office, Whitehall, Aug. 18.

“ *Instructions for forming Local Boards of Health in cities, towns, and parishes of Great Britain and Wales.*

“ When a community supporting its own poor shall be desirous of establishing a Board of Health for its locality, the regular mode of attaining that object will be to convene a public meeting of rate payers, for the purpose of nominating the members.

“ These members should consist of one or more resident Magistrates, of the Clergymen, the parochial authorities (and, where the parishes are incorporated, of a portion of the governors and directors of the poor), with a certain number of substantial householders, one or more medical practitioners, and an efficient secretary.

“ A list of the persons chosen should be transmitted to this office, under cover to the Clerk of the Council in waiting, for the purpose of being constituted a *legal Board of Health*, by an order of the Lords of the Council.”

We conceive it to be highly desirable that the widest circulation should be given to the above instructions, through the provincial press, as their being generally known will save much valuable time and correspondence.

## APOTHECARIES' HALL.

August 2nd, 1832.

Names of gentlemen, to each of whom the Court of Examiners granted a certificate of qualification this day.

Anthony Allinson, Willington, Northumberland; Henry Charles At-

kinson, Doncaster; William Martyn Coates, Salisbury; Thomas Gibson, Wing, Rutlandshire; Charles Underwood, Ross, Herefordshire; William Kelson Wright, Bristol.

August 9th, 1832.

Samuel Hayward Ford, Colceshter; William Orton, Narborough; Charles Greville Ruddock, Bridgewater.

As assistant, Frederick Lampore.

## ACADEMY OF BESANCON.

On the 7th of June this Academy voted the erection of a monument to the celebrated Cuvier, who was one of its members. An eulogium on this universal savans is the subject of the academic concours for 1833. M. Frederick Cuivier was unanimously elected in his place, and M. Dupin has been also elected at the Academie Francais.

## MONUMENT TO THE MEMORY OF CUVIER.

A commission, composed of M. M. de Jouy, F. Arago, Geoffroy St. Hilaire, Durcan de la Malle. de Gerando, David, Villemain, Duparquet, Ad Brogniart, and Percier, has been formed for the purpose of receiving subscriptions for the monument, which is to be raised in the Jardin de Plantes in memory of Cuvier, the nature and importance of which will be determined by the amount of subscriptions. In case it is sufficient, an engraving representing the monument and the features of the illustrious naturalist, will be presented to each subscriber.

*Le Cercle.*

Such are the honours paid by France to science.

## ATTEMPT ON THE LIFE OF BARON DUPUYTREN.

WE received the following intelligence just as we were going to press with our last Number. An attempt was made by a patient at the Hotel

Dieu, Paris, on Saturday the 4th inst. to assassinate the illustrious surgeon, whose valuable clinical lectures we are now publishing. The man was in a state of nervous delirium from a wound in the left leg; he had no hatred towards the Baron, who, we are happy to state, did not receive any injury. M. Dupuytren was so collected afterwards, as to make some clinical remarks on the case, in regard to the nature of the affection, and the acts which persons perform under its influence.

ACCOUNTS from Nismes state that on the 15th inst. during a violent gale of wind from the North, the thermometer rose to 37 degrees of Reaumur, or 115½ of Fahrenheit. According to the regular series of observations kept for 90 years, no such extraordinary occurrence had before been recorded. M. DE BLAINVILLE, Member of the Academy of Sciences, has been appointed Professor of Comparative Anatomy at the Garden of Plants, in the room of the late Baron Cuvier.

*The Fire Fly.*—The brilliant lights which they emit, their rapid flitting motion through the air, and the cheerfulness which they impart to the spirits, by engaging us to watch for their playful illumination, are quite indescribable. There is no difficulty in catching them; and I had the satisfaction of carrying one home with me, and gazing at its mysterious lamp, without doing it that injury which the poor butterfly, and too many other beautiful insects, experience, as the penalty they are condemned to pay for the ephemeral enjoyment of their splendid exterior. I placed it on a book in a dark room, and could distinctly read the words which were within the rays of its light. But the light was not so bright as when it was on the wing and in quick motion; it was more mellow, and like that of the glow-worm in a state of rest; but I did not perceive it to be in any degree

intermittent.—*Giles's Woldensian Researches.*

*Adulteration of Cheese.*—Cheese is coloured red by means of anotto, and anotto is adulterated with vermilion and red lead. The route is circuitous by which lead gets into the cheese, but it does get there, and, when there, the cheese is poisonous. It has been asserted, that ripe old Stilton, and other sorts of cheese, are greened in particular parts by means of verdigris. This method of producing apparent old age, conveys copper into the cheese.

*Bite of an Eft.*—A woman, in the neighbourhood of Chelmsford, was lately bitten in the leg by an eft, in consequence of which the limb swelled excessively, and serious consequences were at one time apprehended. It has been hitherto generally considered that the eft is harmless, but this accident shews that such an idea is merely a common error.

#### NECROLOGY.

Of typhus fever, Mr. Blakey, of Leeds.  
Of cholera, John W. Field, Esq. surgeon-apothecary to the Bantry cholera hospital.

#### NOTICES TO CORRESPONDENTS.

•• A few days absence from town left us in arrear with many of our correspondents.

Dr. G.—It was impossible for us to insert the valuable communication in this number.

Dr. Harrison.—We could not possibly insert the article this week. Press of matter obliges us to exclude various other communications.

R.—A surgeon is not entitled to remuneration under the Anatomical Bill for certifying as to the cause of death, or for making an autopsy. He need not attend unless compensated; neither is he entitled to make any demand as a witness before a coroner, but he cannot refuse to act if duly summoned.

The Public Press.—Though we feel proud of the notices of this Journal by the public press, we cannot but remonstrate with that portion of it which quotes from us without acknowledgment.

*Notice to Authors.*—We have never received a work, large or small, without acknowledgment; and we make this declaration as we

have had several letters about volumes which never reached us. To obviate this state of things, we advise our bibliographical friends to indite our address on the title page. We give this hint, as we and our publishers are frequently troubled about works said to be forwarded for review, which never were delivered to us or them.

Vindex.—We cannot deign to reply in adequate terms to the writer alluded to; if we did, we should shew that we possessed a degree of malignancy equal to his own. Pure compassion restrains us from flaying a man, who, Judas like, attacks us while professing the greatest admiration for what he has repeatedly designated our talents and independence. Let Castigator beware of irritating us; he has already felt our lash, and shall again, if he provoke us.

We have been requested to state that the patient named George Douglass, on whom the taliacotian operation was performed by Mr. Green at St. Thomas's Hospital, did not accompany Captain Parry on any occasion.

Appendix to Mr. Ingleby's paper on the induction of premature labour:—

Erratum in the first note, which reads as follows—"Dr. Ryan, who believes that when cephalotomy is really necessary, the forceps might be used." It ought to have been "Dr. Ryan, who believes that when the forceps cannot possibly be applied, and cephalotomy is really necessary, that the mother would sustain less injury if the Cæsarean operation were substituted, coincides," &c. &c.

In this paper I also omitted to put the following question—Can the ergot of rye, when properly administered, *originate* uterine contraction? Dr. Henry Davies in his communications respecting the ergot in the *Medical and Physical Journal*, for July and August, 1825, remarks—"In cases where premature labour has been intended to be brought on by detaching the membranes near the os uteri, or by puncturing them, it (*viz.* the ergot) has not produced anything like a proportionate effect, unless labour was already going on, then it has had some effect, but not equal to that procured in labour at the full period." This view of the power of the ergot is opposed to the experience of another obstetric physician (the present Dr. Rigby), who in a communication obligingly addressed to me, makes the following observation—"I know of instances where the ergot has been successfully given to produce premature labour in cases of pelvic deformity, and where the membranes were not ruptured artificially."—J. I.

Dr. B. may be assured that the parties of whom he speaks have not any influence with the Editors. The articles which appear in this periodical are not dictated either by party-spirit or party-feeling, but by a bold and independant determination to act honourably and justly to all parties.

T. P. W. has been misinformed.

G. G.—The copies were not sent, owing to

an unfortunate mistake, which shall not again occur.

Mr. W. of Paris. Many thanks for the offer; another friend has sent us the valuable lectures in question.

Mr. S. of Paris.—We are deeply obliged for both communications.

Erinensis.—Any communication from one so justly celebrated would be acceptable, but we are determined henceforth to exclude all personal attacks, and to treat those levelled at ourselves with scorn. The insertion of the strictures on the parasitical editor in question would be conferring an honourable notice on him which he can never deserve.

A. Z.—Yes, he is the writer in question.

E. S. C.—The avowed editor is legally though not morally responsible for several of the reviews or leading articles in this Journal. If our correspondent be a judge of style and composition, he must at once perceive the truth of this statement.

S. L. T.—We should be most happy to comply with the request, if any good would result; but we can assure our correspondent that the profession are quite apathetic on such a subject.

J. V. L.—Will our correspondent favour us with a specimen?

A Georgian.—We trust the day is not far distant when we shall have the pleasure of adducing solid and satisfactory proofs of the value of the communications.

A chemist cannot prescribe behind his counter; he violates the Apothecaries' Act by so doing, as receiving payment for his prescriptions.

Captain Burdett's case.—We are gratified to think that so great a luminary as Lord Tenterden entertained precisely our views on that transaction. Mr. Heath was honourably acquitted.

#### WAR OFFICE, August 17th.

21st foot, staff-surgeon E. Pilkington, from half-pay, to be surgeon, vice Barclay, appointed to 35th; 13th. Surgeon G. Barclay, M.D. from 21st to be surgeon, vice D. M. Mc. Gibbon, who retires upon half-pay, hospital staff. Hospital staff assistant-surgeon T. La Cloche, from half-pay 7th Royal Veteran Battalion, to be assistant-surgeon to the Forces; 83rd foot, assistant-surgeon David Pitcairn, from the hospital staff, to be assistant-surgeon, vice Watson, deceased.

#### NAVY DEPARTMENT.

##### Appointments.

Mr. G. A. Acheson, surgeon to the Donegal, vice Bromley; Mr. Penny, surgeon of the Wye, convict hospital ship at Sheerness, and Mr. Beazley, surgeon of the Canada, hospital ship at Chatham, have been permitted to exchange.



## MEDICAL APPOINTMENTS.

Dr. A. Frampton has been appointed Assistant Physician to the London Hospital.

Mr. Kirby, the eminent surgeon of Dublin, has been appointed Professor of the Practice of Medicine in the Medical School at the Royal College of Surgeons, Dublin.

Dr. James Craig Somerville has been appointed Inspector of Anatomy for London, Middlesex, Kent, and Surrey, by the Secretary of State for the Home Department.

Dr. Craigie, the able and learned Editor of the Edinburgh Medical and Surgical Journal, has been appointed Anatomical Inspector for Edinburgh.

## LITERARY INTELLIGENCE.

Dr. Carswell is preparing for the press, *Elements of Morbid Anatomy*, illustrated by an immense number of engravings.

We are happy to perceive that Dr. Hope is on the point of bringing out a work on *Morbid Anatomy in parts*, to be complete in twelve or fifteen numbers, each containing four plates, or about twenty engravings, with half a sheet of descriptive letter press.

## BOOKS.

*The Principles and Practice of Obstetric Medicine*, in a series of Systematic Dissertations on Midwifery, and on the Diseases of Women and Children, illustrated by numerous Plates. By David D. Davis, M.D. M.R.S.L. Professor of Midwifery in the University of London, &c. &c. London, Taylor, 1832. Part X.

•• This valuable work continues to make its appearance periodically. We perceive that an erratum, which has crept into the work, has been unwisely corrected on the cover. We would advise Dr. Davis to place it in a foot note, or at the end of the book when complete.

*The History of the Contagious Cholera, with Remarks on its character and treatment in England.* By James Kennedy, Member of the Royal College of Surgeons, London. Third Edition. London, Moxon, 1832. pp. 477. With a Map.

*The Glasgow Medical Journal*, August, 1832.

*The Microscopic Cabinet of Select Animated Objects; with a Description of the Jewel and Doublet Microscope, Test Objects, &c.* To which are subjoined, *Memoirs on the Verification of Microscopic Phenomena, and an exact Method of appreciating the Quality of Microscopes and Engiscopes.*—By C. R. Goring, M.D. Illustrated from Original Drawings, by Thirteen coloured Plates, and numerous Engravings on Wood. By Andrew Pritchard. 8vo. pp. 246. London, 1832. Whittaker, Treacher & Arnot.

•• This is a beautiful volume, which must be deeply interesting to those engaged in the study of natural history.

*A Treatise on Cholera; containing the Author's Experience of the Epidemic known by that Name, as it prevailed in the City of Moscow in the Autumn of 1830 and Winter of 1831.* By James Keir, M.D. Professor of Pathology, Therapeutics, and Clinical Medicine in the Academy of Medicine, &c. &c. 8vo. pp. 138. Edinburgh, Adam Black.

The members of the profession, who consider the damages awarded in the case of *Ramadge v. Ryan* excessive, have commenced a subscription to enable the defendant to apply for a new trial, or defray same.

## SUBSCRIPTIONS RECEIVED.

	£.	s.	d.
Dr. James Johnson	10	10	0
Dr. Uwins	2	2	0
Dr. Tweedie	5	5	0
W. B. Costello, Esq.	5	5	0
A. C. Hutchinson, Esq.	2	2	0
J. P. Holmes, Esq.	2	2	0
Greville Jones, Esq.	2	2	0
— Skey, Esq.	2	2	0
A Naval Surgeon	2	2	0
J. Foote, Esq.	1	1	0
M. W. Henry, Esq.	1	1	0
Dr. Harrison	10	10	0
Dr. Blicke	5	5	0
Morgan Austin, Esq.	2	2	0
A Dresser of St. Bartholomew's Hospital	2	2	0
E. L. Devonald, Esq.	1	1	0
P. Reilly, Esq.	1	1	0
Alex. M'Nab, Esq.	1	1	0
M. D.	2	2	0
Dr. Hood, Brighton.	5	5	0
W. Hughes, Esq.	1	1	0
W. F. Crump, Esq.	1	1	0
A Lady	2	2	0
J. Ingleby, Esq.	1	1	0
Professor Cooper	2	2	0
E. A.	5	5	0
A Hospital Surgeon	5	5	0
Dr. Sigmoud	5	5	0
M. Downing Darwin, Esq.	1	1	0
A Country Surgeon	1	1	0
G.	1	1	0
Sir Charles Aldis	1	1	0
Dr Aldis	1	1	0
G. Jewel, Esq.	1	1	0
T. Radford, Esq. Manchester	2	2	0
A	1	1	0
Dr. Graves, Dublin	1	1	0
Dr. Montgomery, ditto	1	1	0
Dr. Leahy	1	1	0
Dr. Hartly	1	1	0
Dr. Apjohn	1	1	0
Dr. Stokes	1	1	0
Dr. Fergusson	1	1	0
Dr. Collins	1	1	0
Dr. Breen	1	1	0
Dr. J. Labatt	1	1	0
Dr. Colles	1	1	0
Dr. Churchill	1	1	0
Messrs. Hodges & Smith, ditto	2	2	0
A True Friend	1	1	0
W. D. Mayne, Esq.	1	1	0

# London Medical and Surgical Journal.

No. 31.

SATURDAY, SEPTEMBER 1, 1832.

Vol. II.

SELECTIONS  
FROM THE  
CLINICAL LECTURES,  
DELIVERED AT THE  
HOTEL-DIEU IN PARIS,

*During the Session of 1831 - 32;*

BY BARON DUPUYTREN,  
PRINCIPAL SURGEON OF THAT HOSPITAL.

GENERAL CONSIDERATIONS ON THE TREATMENT OF FRACTURES OF THE EXTREMITIES.

*Description and Mode of Application of the Bandages.*

THERE is not perhaps any surgical disease which requires, on the part of the practitioner, the knowledge of a greater number of details, than fractures in general. It is not sufficient for him, in fact, to be able to establish the diagnosis, and to apply the measures which form the principal basis of the treatment; he must also know the rules of conduct he should adopt according to the different species of complications, the nature of the accident, and the various circumstances of the injury. But if he is really well instructed, he will not disdain to employ attentions which are commonly considered too minute and of too little importance, although the neglect of such rules, on their being forgotten, often give rise to the most dangerous consequences. Thus the precautions to be taken in removing the patient's clothes, and transporting him from one place to another, in order to save him from suffering, and to avoid increasing the injury which may exist in the soft parts, the situation in which he ought to be placed, the form and degree of softness or hardness of the bed on which he is to lie during treatment, the manner in which the dressings and application of the

apparatus are to be performed, the measures to be adopted in order to ascertain the consolidation of the callus, the advice to be given to the patient at that period, are all points, the utility of which has been fully proved by experience, and which should particularly attract attention.

In general, I employ the same apparatus for all the fractures of the leg and thigh; in saying this, I do not include fractures of the lower portion of the fibula. I make use of a rolled bandage in preference, whenever the fracture has occurred on a thoracic extremity, unaccompanied by a wound. I place some compresses across the limb, at the situation of the fracture, and then splints, either of tin, paste-board, or of wood.

In case of fracture of the humerus, the patient is seated on a bed; one, two, or three compresses are applied, on which some turns of a bandage are made; other compresses are then placed above and below; then splints are applied on the four surfaces of the limb; they ought not to project on the osseous articular projections; a bandage should be used to keep them in their situation.

When the fracture has taken place in the bones of the fore-arm, the necessary pieces of the apparatus are, a bandage about four or five ells long, graduated compresses, two splints of the length of the fore-arm, or even a little longer, and certainly wider. The patient being seated or lying down, an assistant takes hold of the fingers, while another takes the arm at its lower portion; the fore-arm being kept slightly flexed on the arm, you proceed to make extension. By means of careful pressure on the anterior and posterior surfaces of the fore-arm, you push the extensor and flexor muscles into the inter-osseous space, to which you thus restore its natural dimensions, by separating the fractured portions of the radius from those of the ulna; then the four fingers and the metacarpal bones are to be enclosed with turns of bandage as far as the wrist; it is then to be entrusted to an assistant; graduated compresses of a proportionate width, and soaked with a

vegeto-mineral solution, are to be applied on the dorsal and palmar surfaces, and ought, indeed, to project slightly on the carpus, metacarpus, and humeral tuberosities. The two splints being then applied over this, the bandage previously rolled on the hand is taken from the assistant, and its turns continued on the fore-arm, from the wrist to the elbow. You will thus have increased the antero-posterior diameter, and the inter-osseous space necessary for the motions of rotation will be preserved. If the fracture of the fore-arm is complicated by a wound, the apparatus of Scultetus, or some other analogous to it, should be employed.

In fractures of the radius, I add to my ordinary apparatus a splint, which I call cubital; this consists of a plate of iron, curved at its inferior extremity, its concavity containing several buttons. The superior extremity of this is to be affixed to the cubital side of the fore-arm; between the internal side of the wrist, and the convexity of the splint, a compress folded several times is to be placed, so as to separate them from each other; the hand is then to be brought towards the splint, by throwing over the radial side of the hand, a noose formed by a wadded compress, which is to be placed between the thumb and base of the index finger, and the two extremities of which, having riband attached to them, are to be tied on the splint, and fastened to one of the projecting buttons.

When the olecranon is fractured, I prefer the uniting bandage for transverse wounds to the ordinary apparatus; as, in extension of the limb, the superior fragment or the olecranon is the only one which tends to be displaced, graduated compresses are only required to be placed above the apophysis. I also make use of an anterior splint, but that which I employ is a straight one.

The bandage of Scultetus is almost exclusively employed by me, in treating fractures of the leg and thigh, as a roller bandage could not be kept in its situation, it would be displaced every instant. It is composed of the following pieces:—

1st. Of several pillows; 2ndly, of several cloths; 3dly, bands; 4thly, a *drap fanon*;\* 5thly, the eighteen-tail bandage; 6thly, transverse compresses; 7thly, longitudinal compresses; 8thly, graduated compresses, in case the bones should project; 9thly, linen with holes in it, with cerate spread on it, charpie, or diachylon, if there should be a wound; 10thly, cushions stuffed with bran; 11thly, immediate splints; 12thly, mediate splints; 13thly, a body bandage; 14thly, a *sous cuisse* and a *sous-pied*. We will now examine, successively, the uses of each of these pieces.

The pillows are destined to receive the fractured limb; the first advantage derived from

their use is preventing an afflux or stagnation of blood or serum, by keeping the limb raised; it forms a hollow for itself, which keeps it in one position, and prevents it rolling on the bed.

The sheets folded several times, are placed on the pillows, in order that these may not be spoiled, either by blood or pus; this precaution is especially necessary in hospitals, where, without it, the pillows, soiled and imbued with pus or blood, would soon become foci of infection.

On these sheets are extended the bands destined to fix all the pieces of the apparatus, and to make the whole only one *corps de bandage*. There should be three for the leg, three for the thigh, and six for the thigh and leg.

The *drap fanon* ought to have a width equal to the length of the limb, and be folded double. It should be placed transversely to the bands, and is destined to receive the splints at its extremities, and to give them support.

On this *drap fanon* are then to be placed the small bands, of the bandage with eighteen tails, united together, or separate. If there is a wound, and pus or blood flowing from it, they should be separate, in order to allow of their being changed one by one, when stained. This change may be readily performed in the following manner:—A clean bandage is attached to the extremity of the dirty one, by means of a pin, the head of which is turned towards the side of the limb, in order that the latter may not be wounded in drawing away the one which is soiled; traction is then to be made on the opposite extremity of the latter, and as it is drawn away, the clean one takes its place.

If the fracture is uncomplicated with a wound, the bandages may be united in the middle, to the number of 9, 10, 11, or 12; the first is to be half covered by the second, the second by the third, and so on. In applying them, you will proceed from below upwards, for, if you began by the superior part, the apparatus would be thrown into furrows, which should be carefully avoided; the bandages should be long enough to go almost twice round the limb.

The transverse compresses, which should envelope the limb, should be folded twice only, as, when folded in three, their application is rendered more difficult. They should be as long as the bandages. If there is a wound, you ought to be able to renew the compresses, without changing the apparatus. It is in such cases that the advantages of the longitudinal compress, which can be withdrawn when it is soiled, are appreciated.

Two, three, four, or more compresses, varying in form, but generally square, are then applied around the limb. It is also very useful to place graduated compresses on the length and width of the extremity. If the

\* The cloth in which the splint is enclosed.—REF.

tibia, for example, is fractured, and the fragments project outwards, the compresses should be placed on the sides and along the bone; should the superior fragment project forwards, they will then be placed transversely.

It is also in these kind of cases, that those splints are necessary, which I have called immediate, because they act directly on the fragments, through the intermedium solely of the graduated compresses. These splints are made of pasteboard or light wood; if they were inflexible, they would injure the parts. It must never be forgotten that they are not to be placed immediately on the parts, without interposing between them one or two graduated compresses.

When all this is disposed, the transverse compresses are applied, and then the bands of the eighteen-tailed bandage around the limb, taking care to direct them rather obliquely forwards, so that they should cover each other.

Then comes the turn of the mediate splints, each rolled up in the extremity of the *drap fanon*.

Between them and the limb, bran cushions are placed; they ought to be rather longer than the limb, about five or six inches wide, and an inch and a half or two inches thick. They should be carefully modelled to the form of the limb, by diminishing the thickness at the part corresponding to its convexity, and, on the contrary, increasing those which answer to its concavity.

The apparatus is then to be made into one piece by the bands which are to be fastened over the external splint, on the side where the operator should be placed, by simple knots, and a bow.

A *sous-pied*, made with a long compress, or a sandal having ribbons which are attached to the sides of the *drap fanon*, will keep the foot in a fixed position.

Finally, a cradle should be placed over the extremity, so as to defend it from the weight of the bed-clothes. But this is not yet all. In order to prevent the movements of the whole of the limb, a sheet folded in the form of a cravat, that is to say, the two extremities of which have been first folded towards each other, and then the two sides refolded on these extremities is fixed on one side of the bed: it is then passed over the thigh or leg, according to which is fractured, and the other extremity fixed to the opposite side of the bed. If the fracture is of the femur, you will also place around the pelvis a body bandage, which will embrace the two hips and the superior extremity of the external splint. By neglecting this precaution, if the fracture exists at the upper part of the bone, or at the neck, the patient will not be cured without curvature of the bone.

The bandage, applied in the manner I have just described, is extremely solid, and is not disarranged even when the patient becomes delirious.

Let me add to these details, that the bed on which the patient lies should not be too soft; it should be equal every where, for if convex in any part he might slip; it should have a firm mattress, and a sheet folded double under the patient, to raise him up, and to prevent the bed being soiled. Finally, there should be no head-board, neither should the feet be elevated.

After having described the pieces which compose the bandages, I ought to call your attention to the care which the situation of the patient requires immediately after the accident. If he is brought on a litter, do not be in a hurry to remove him from it; he should be undressed on it, and the bed and apparatus first prepared for him. The boots and stockings should be slit up, and not drawn off whole, in order to avoid any shock, or painful dragging; the limb should be washed on the litter, in order that it should not be done when on the bed, which might be dirtied. This being done, an assistant takes hold of the patient round the body, another of the two extremities, while the operator, or in his absence another person; supports and carries the fractured limb. In this manner the patient is carefully raised, and placed in bed. The pillow should be but slightly raised, in order that it may not slip down, and yet sufficiently so that the head may not fall backwards, and subject the patient to sanguineous congestions.

When applying the bandage, the operator should be on the external side of the fractured limb; an assistant, standing at the inner side, has exclusively the care of presenting him with each piece of the apparatus. Another assistant holds the foot, seizing it with the left hand forwards on the ankle, backwards with the right hand between the thumb and finger, on the sides of the heel. A third assistant, standing at the knee or the hip, according to the situation of the fracture, places his hands on the sides of the condyles of the femur or tibia, avoiding pressure on the popliteal vessels or nerves; for, if there be a wound, such pressure would cause blood to flow. Then compresses soaked in a vegeto-mineral solution, or other resolving liquid, are held at either extremity by the operator and the first assistant, and then extended on the limb, avoiding folds. If there is a wound, it should be covered either with court-plaster, or a compress pierced with holes, and spread over with cerate, and then charpie on that. Finally, the respective pieces of the apparatus are to be disposed of successively, as I have already indicated.

If there is not any wound, the apparatus should be raised, and a new dressing applied the next day; for considerable tumefaction and gangrene have taken place in twenty-four hours. It should then be examined every five or six days, if the patient does not suffer pain; oftener if he does. In regard to

the duration of the treatment, in general, the apparatus should be kept on for twenty-eight or thirty days in children, forty in adults, and a much longer time in old persons. It should not be removed until consolidation appears to be complete.

In order to be certain of this consolidation, the operator should carefully seize the two portions of the fractured bone, and endeavour with prudence to make them execute some movement; if the callus yields, the bandage must be immediately reapplied; if it is resistant, it need not be reapplied, but it should be left loose by the side of the limb for three or four days.

The patient, at this period, must not be allowed to walk immediately, as the callus may yield to the weight of the body, or the action of the muscles; he should remain quiet in bed still for ten, twelve, or fifteen days; he may then sit up in bed, or on an arm-chair, the limb being placed on a pillow, with a bandage rolled round it for at least three weeks. He may afterwards use crutches, which should be furnished with cloth, in order that they may not slip on the ground. He will inhabit, if possible, the ground-floor, will avoid walking on unequal pavement, and will prefer sanded paths.

I have thought proper to insist on these minute and apparently common details, because experience has taught us how very necessary it is that a practitioner should know them, and how often and how generally nevertheless they are misunderstood, and still more often misapplied.

REMARKS ON THE ABUSE  
OF  
ANIMAL AND VEGETABLE FOOD IN  
HOT SEASONS;

AND ON THE  
USE OF DRIED MEATS, &c.

BY  
JOHN HANCOCK, M.D.

AMONGST the predisposing causes of the prevailing epidemic, the excessive use of fruit and vegetables have, with reason perhaps, been much deprecated. We are ever prone to run into extremes, and there can be no doubt that too exclusive a use of *fresh animal food* has also contributed to the same evil.

It is observable here, that amongst all ranks in England, a strong predilection exists for animal food, *recking with the blood*, as beef especially, fresh from the bullock, and it appears now to be carried to greater excess than usual.

We know well that such indulgence fre-

quently induces very malignant diarrhoea and dysentery amongst persons predisposed, as in sailors and soldiers in a hot climate; and the temperature here, at this season, approaches nearly to that of the tropics. It is to such indulgence that I am inclined chiefly to attribute the recent appearance of cholera amongst the emigrants lately arrived in Canada, where the summers are much warmer than in England, even more oppressively so indeed than in the West Indies, where constant ventilations from the *sea breeze* cools the air, and renders it genial even both to animal and vegetable life.

From considerations above alluded to, we should not be surprised shortly to learn, that either cholera or yellow fever had broke out in New York, which is likewise of late the resort of numerous emigrants; and it might not be improper to caution them with respect to their diet, not to indulge too freely on their arrival in the use of fresh animal, or vegetable food. I know from prolonged experience, that in the sickly seasons of South America, dried meats, as the *tassajo* or *tassaou*, are by far the most salutary, that is to say, beef cut into slips, sprinkled with salt, and dried in the sun, either hung on a line of rope, or placed on hurdles. By this means it is divested of the blood and putrescent juices, rendered more conducive to health, and affording a greater share of nourishment, as being of easier digestion;\* it is even more agreeable to most persons after a little use, particularly so when preserved with a slight admixture of saltpetre and sugar with common salt. It might be prepared with equal facility here, and would obviate the necessity of using meat in a half putrescent state, as we know the poorer sort of people are, during the hot weather, frequently compelled to do, and which, I feel very confident, contributes even more than the use of vegetables do, to the putrid diseases that prevail in hot seasons. The *tassaou* is by far the best provision for a sea voyage, and for those especially who are unable to lay in a supply of fresh stock; and moreover, were this practice adopted, it could not fail to contribute vastly to the health and comfort of seamen in his Majesty's navy; to all indeed, on long voyages, to the East and West Indies especially, serving at least to suspend most beneficially the use of *salt junk*, for two or three days in the week. I am much mistaken if this plan, duly acted on, would not improve the economy of diet on shipboard more than all that has yet been devised, allowing at the same time due credit to *lemon juice*, *sour crout*, &c.

The foregoing is a copy of remarks sent on *Monday morning*, the 6th inst. one to *The Times*, another to *The Morning Herald*; the same was seen and read three weeks ago by

\* Physiologists have asserted that blood is totally indigestible in the human stomach; the crour probably is so, for in gastric hæmorrhages we usually see the blood vomited in dense clots.

The very ingenious chemist Mr. Booth, who considered it a subject of deep importance. It has not been inserted in either paper, although the day following (Tuesday the 7th) *The Times* took occasion to remark, that no advices arrived of the cholera having appeared in any part of the United States: on Thursday it is announced in both these and other journals, that the disease had entered New York!

My voyages on the Essequibo, the Rinoke, and amongst the West Indian Islands, have so fully convinced me of the advantages of *dried* meats over those exclusively preserved with salt, that I could really wish to see it brought into general use, and even recommended to the notice of every wise legislature. We cannot expect the importance of such a proposition will be perceived or appreciated by any of the fireside travellers of *The Times*, *The Herald*, or *not*. At the same time, Gentlemen, do not suppose I feel any chagrin that those *sages* have slighted my predication, that we might shortly expect to learn the cholera had entered New York; for none but the most purblind ignoramus, or abettors of quarantine, could fail to foresee the probability of such an event; notwithstanding their extraordinary efforts at New York to *fence out* or evade by non-intercourse, an epidemic, propagated by the atmosphere, and not like small pox, by infection, or the contagion of human bodies. Experience, however, must teach the citizens the folly of combatting a phantom, as it has done in their long and tedious warfare, waged against that imaginary demon, the *contagion* of yellow fever.

August 16th, 1832.

Turner-street, Commercial Road.

## DR. HARRISON ON THE LAWS

RELATING TO THE

### ROYAL COLLEGE OF PHYSICIANS.

To the Editors of the *London Medical and Surgical Journal*.

GENTLEMEN,

I HAVE the honour to forward to you, according to my promise, an abstract of the Charter of the London College of Physicians, which will I trust, from the importance of the subject, be deemed worthy of your attentive consideration, and that of your numerous readers. The few particulars annexed to it will not, I hope, be thought either irrelevant or useless. The college was established by Act of Parliament in the reign of King Henry the Eighth, for several highly important purposes, all of which have for many years been wholly neglected to promote others, never contemplated by the Legislature. According to the petition laid before the House of Commons, and of which I send

you a copy, the college was founded, 1st, to restrain empirics; 2ndly, not to examine into the fitness of physicians to practise medicine, that being done in the Universities, but to exercise a wholesome control over their moral and professional conduct; also, by the same means, to secure a constant supply of genuine drugs for the sick; 3rdly, to license practitioners, residing within seven miles of London, who had not obtained medical degrees in some university. As no branch of the healing art had then been taught in any part of Great Britain, the young men were forced to obtain their medical knowledge upon the continent. Accordingly, when King Henry granted a Charter to the College of Physicians, he confined it to six doctors of physic, graduates of Italian universities. It therefore follows from the tenor of the charter, and early practice of the college, that it is equally open to the graduates of every university, and that the physicians of Oxford and Cambridge are entitled to no preference over the rest. The superiority they assume is arrogated, illegal, manifestly injurious to medical science, and hurtful to the sick. The truth of this statement cannot be doubted, because the English universities are not, never were, and from inherent defects cannot be, made complete schools of medicine.\* The physicians brought up in them must either have recourse to other sources of information, or remain through life imperfectly educated and qualified. By a subsequent enactment, the college was empowered to examine and admit, or reject, all persons intending to follow any branch of the sanative art in the provinces of England and Wales. Instead of conforming to these salutary Acts of the Legislature, the fellows have shamefully violated them to introduce measures more agreeable to themselves, and better calculated to forward their particular objects.

To promote these, the subordinate class of licentiates was arbitrarily formed about the middle of last century, to counteract the rising prosperity of the University of Edinburgh; and is still continued, although declared so long ago as 1767, by Lord Chief Justice Mansfield, to be *illegal*.

The college has, by another absurd and vexatious regulation, actually superseded the law of the land. It is provided, in an Act of the 32nd of King Henry the Eighth, that forasmuch as the "science of physic doth contain within itself the knowledge of surgery, therefore, any physician may exercise the science of physic in all its parts." It would be foreign to my present purpose to discuss the advantages which physic and surgery formerly received, or would now receive from combining the practice of both

\* Dr. Baillie, Sir H. Hallford, and other presidents of the college, were obliged to repair to Edinburgh to complete their medical education.  
--- Eds.

in the physician. They were so united from the foundation of the college, till this Act of the Legislature was superseded by a by-law and unauthorized regulation of the college, which requires its members wholly to abstain from the practice of surgery. Having shewn that the charter is in itself admirably fitted to protect the metropolis against incompetent and unprincipled pretenders, and to provide the apothecaries' shops with genuine drugs, I trust you will be of opinion that the college has suffered in its usefulness, by the arbitrary and unconstitutional changes, which have from time to time been introduced, to serve the purposes of a few acting in direct opposition to the interests of the people, and of the profession at large.

These and other illegalities and grievances are more fully set forth in the petition, (which has been printed by the House of Commons, and to which I desire to refer you for particulars), trusting that you will esteem it of sufficient importance to be published in your widely circulated Journal, for the information of the faculty, and in order to shew that the by-laws, and other proceedings of the College of Physicians, are in many ways highly detrimental to the public health, and prejudicial to medical science.

The proceedings which gave rise to the petition, originated with the Lincolnshire Benevolent Medical Society. The members, at their annual meeting, held so long since as the summer of 1805, came to several resolutions on the defective state of medical practice, in the provincial districts of England and Wales. I, as their president, was unanimously requested to lay them before the late Sir J. Banks, President of the Royal Society, and to take such other steps in regard to them as he should recommend. In consequence of my interview with him, at his country residence near Horncastle, I proceeded to London, and attended several meetings at the house of Sir Joseph, in Soho-square, with the leading members of the metropolitan faculty. I also had communications through the late Sir Walter Farquhar, with Mr. Pitt, the First Lord of the Treasury, who said, "I am friendly to the measure, and will take it up." Soon afterwards, he fell into bad health and died. The present Marquis of Lansdowne, then Lord Henry Petty, succeeded to the Chancellorship of the Exchequer. I waited upon him with Sir J. Banks, and was very favourably received. We had a long conference on medical subjects. After my return into Lincolnshire, a correspondence took place between us, which was continued till he left office. I afterwards waited upon Mr. Perceval, when he was Minister, accompanied by Sir Joseph Banks, and the late Mr. Chaplin, Member for Lincolnshire. He, like his predecessors, was forcibly impressed with the defective state of the medical profession, and

the necessity for better regulations. There was also a strong feeling in the public generally, which is not abated, that something was wanted to improve the profession, and make it more useful to the sick. I am convinced, that had it not been for the selfishness and persevering hostility of the three medical corporations, more especially the College of Physicians, the object so much desired and so long wanted would then have been attained.

Soon after my encouraging interview with Mr. Perceval, he was basely assassinated. Having encountered so many unexpected obstacles, and being personally very little interested in the accomplishment of my object, I determined to retire from the contest, and trouble myself no longer with medical reform. But in consequence of the brighter prospects which already present themselves to our view, I have ventured, at the end of a long life, to come forward once more in favour of the public and my brethren, when I trust that my motives can neither be mistaken nor misrepresented.

Holles-street, Cavendish-square,  
Aug. 20, 1832.

*To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled.*

THE HUMBLE PETITION OF THE UNDERSIGNED PHYSICIANS—

SHEWETH,

That a college of physicians exists in London, assuming powers which your Petitioners are prepared to prove have an injurious effect upon the subjects of these realms and the practice of medicine:

That the attention of medical men, in every department of the profession, has at length been roused to the manifold evils, proceeding from its defective arrangement, and the sources from which they respectively spring; the great body of British physicians, who are excluded from their inherent rights in the College of Physicians, most respectfully submit, that it is fitting to inquire into the grounds of their rejection, and to enable them to assert their just claims to participate in its honours and emoluments, and to promote the general interests of the profession:

Your Petitioners beg to state, that the "College, or Commonalty of the Faculty of Physic," sometimes denominated the "Royal College of Physicians," was founded by Act of Parliament more than three hundred years ago, for several highly important purposes:

At first its affairs were managed agreeably to the charter, and it then fulfilled the wise and benevolent intentions of the founder; medical science was assiduously cultivated, and meritorious practitioners liberally encouraged; quacks were punished, and the public health carefully protected:

In the course of time abuses crept in by

the *rulers* being more anxious to promote private objects than to enlarge the sphere of professional usefulness; a new policy was then introduced; the most accomplished and best educated physicians were, to the detriment of medical science, without any just cause, refused admission into the college, and subjected to the most refined and persevering opposition:

Your Petitioners beg to mention, that among the proscribed were many of the most celebrated men—as Doctors Bonham, Levett, West, Schomberg, Askew, Fothergill, &c., even Sydenham, though an Oxford graduate, was excluded by the college, so indifferent were they to the most sacred duties, and the obligations confided to them for public and private purposes; but the measure of injustice and selfishness was not complete till the middle of last century; at that time the physicians were in quite an arbitrary manner divided into fellows and licentiates, under a by-law still acted upon, though declared to be illegal by Lord Mansfield, Chief Justice, and his associates on the bench, in 1767, in the case of the College against Levett, and in 1768, against Fothergill:

The Fellows of the College have thus verified the words of Holy Writ—“Very truly there was never any thing by the wit of man so well devised, or so sure established, which in continuance of time hath not been corrupted:”

Your Petitioners submit, that the college was established to promote medical science, and discharge and accomplish great and highly beneficial objects, but the institution has entirely failed in effecting those desirable results, and the fellows continue to the present time to be so unmindful of their engagements to the public, and the great body of physicians, that a country possessing many of the most learned, able, and honourable physicians, is so entirely overrun with rapacious, ignorant, and extortionate quacks, as to have become the jest and scorn of other nations; even to this hour, and in this enlightened country, their presumptuous audacity fills the newspapers with mendacious advertisements, and their names are daily paraded in the crowded streets, and under the very windows of the college, unresisted and unnoticed:

Your honourable House will hardly believe, that while these enormous abuses pass unredressed, the fellows seek every opportunity to persecute all physicians, although regularly educated and properly qualified in the best schools of medicine in the United Kingdom, and in foreign countries, who refuse to submit to their unwarrantable impositions, whatever may be their qualifications and claims to public estimation:

Your Petitioners complain, that the possession of an university degree, however celebrated the school, which ought to procure confidence, is not only rejected as an incom-

petent qualification, but considered in the British capital to be the only bar to medical practice:

Your Petitioners submit that the truth of these complaints will more clearly appear on a careful analysis of the charter under which they claim to act, but from which they have, in principle and practice, wholly departed, insomuch that the charter is not even recognised in any of their Acts:

Your Petitioners hereby declare, that the College of Physicians was instituted by Act of Parliament, in 1523 and 24, for three specific purposes, which have for a long time been wholly disregarded by the fellows:

The charter was granted by King Henry VIII. “To put a reasonable check to the practices of the wicked, and repress the audacity of bad men, whereby divers injuries are done to the ignorant and credulous people; and that the fellows, for their own credit and the public good, will take care, as well by their own weight and example, to discountenance the ignorance and the rashness of the before-mentioned persons, as to punish them by our laws lately promulgated, and by the regulations to be made by the same college:”

Secondly—“To provide for the superintendence and scrutiny, correction, and government of all and singular the *physicians practising the faculty of physic* in the said city, or within seven miles round the same, likewise the punishment of them for their faults in the improper exercise and practice of the said faculty:”

Also to provide for “the superintendence and examination of all sorts of medicines, to be given, administered, or applied to the liege subjects for the healing and curing of their infirmities, for the advantage and use of the said lieges, so that the punishment to be inflicted on any of the said practitioners in medicine, offending in the premises, shall be by fine, imprisonment of their bodies, and other reasonable and proper means:”

Thirdly—“To provide, that no person *not being a physician*, shall practise the faculty of medicine within the said city, or seven miles round the same, unless admitted by the president and commonalty, or their successors for the time being, under the penalty of five pounds for every month, in which he shall have practised the same faculty without such admission:”

Your Petitioners submit that these were the principal inducements which led King Henry the Eighth and the Legislature to establish the College of Physicians; while its affairs were well conducted, and the objects which were contemplated were effected, harmony prevailed throughout the profession, until a dominant party converted the college into an engine to oppress a great body of the faculty, and to promote their own views. From that time the constitution was entirely changed, and the college ceased to manage



its concerns according to the charter, and that instead of complying with the wishes and directions of the Legislature, the fellows either entirely overlooked or grossly abused all the trusts reposed in them.

So long as they were suffered on their own authority to fine and imprison empirics and untitled practitioners, they went on prosperously enough for their own interests, and seized upon every opportunity to increase their revenues by arbitrary mulcts:

These mulcts, which at first were levied upon *quacks* only, but the spirit of monopoly having found a ready admission into the college, were subsequently levied upon respectable physicians, who were unjustly excluded by the unlawful and arbitrary limitation of the number of fellows, and they so treated, became not only the unhappy subjects of the jealousy of their privileged brethren of the college, but degraded in public estimation, as far as the college could effect it:

The increase of the metropolis requiring a larger number of physicians than the narrow spirit of the College of Physicians would allow, the original number of twenty fellows was increased to forty, and afterwards to sixty, thus establishing an odious and injurious monopoly equally prejudicial to the former, and wholly inadequate to the demands of society; all above that number, whatever might be their attainments or qualifications, not only being interdicted practice, but subjected to the most vexatious and unfeeling persecutions:

Towards the middle of last century, the number, however, of excluded physicians still increasing, and their favour with the public likewise augmenting, the College of Physicians discovered the necessity of relying on some surer aid to preserve their power:

It was at this period that they devised the scheme of separating the physicians of London into two classes, one of whom, the Graduates of Oxford and Cambridge, were admitted, as matter of right, to the privileges of fellows, while the other class, consisting of the physicians of all other universities, were as unreasonably excluded. Hence the illegal and arbitrary distinction of fellow and licentiate, which subsists to the present day:

Your Petitioners submit, that the better to understand and expose these offensive and injurious proceedings, a reference to the charter will shew, that King Henry granted to six physicians, selected out of a Company in the City of London, namely, to John Chambre, Thomas Linacre, Ferdinand de Victoria, Nicholas Halsewell, John Francis, and Robert Yaxley, that they and all other resident physicians, "of and in the aforesaid city, shall become in fact and in name one body or perpetual commonalty or college; and that the same commonalty or college may for ever elect and make out of that

commonalty some man prudent and skilful; In the faculty of medicine for president of the same college or commonalty, to superintend, take cognizance of, and govern for that year the aforesaid college or commonalty, and all men of the same faculty and their business; and that the same president and college or commonalty, shall have perpetual succession, and a common seal to be used in the affairs of the said commonalty and president for ever:"

It is hardly credible, and yet it is strictly true, that these six physicians had all taken their degrees at Padua, or other Italian University. The College of Physicians was, therefore, committed both in fact and in words by the royal founder, indiscriminately, to physicians of every university. Accordingly none had any preference one over another for many of the first years. With respect to Oxford and Cambridge graduates, who have arrogated to themselves all the advantages of the charter, and subsequently contrived, by a series of encroachments, to confine the college to their own body, they are not even mentioned in the Charter or Act of Parliament confirming it. Their usurpation is, therefore, wholly illegal. Indeed, as medical instructions had never been delivered at either university, when the college was founded, it would have been preposterous, in the highest degree, to have endowed them with greater privileges than the universities enjoyed where medicine was carefully and regularly taught:

Your Petitioners submit, that it would not have been more preposterous than the practice of the college now is to admit them:

Your Petitioners having brought to the notice of your honourable House, that the fellows have entirely disregarded the Charter and Acts of Parliament for many years, as your Petitioners allege, and broken every condition under which they were incorporated, beg also further to observe, that it yet remains to point out some of the illegal and vexatious proceedings still in full operation, and of which your Petitioners, as well as the other licentiates and independent physicians, have just cause to complain:

Your Petitioners are ready to prove at the bar of your honourable House, that it is not possible at this time for any person to be regularly and properly educated, either at Oxford or Cambridge University, for the medical profession:

First, That while it can be proved, that the fellows have in so many ways violated their duty to the public and the faculty, they have been ever ready and forward to promote their own emoluments and aggrandizements:

Your Petitioners allege, that a careful attention to the whole of their proceedings, for the last two hundred years, will satisfy your honourable House, that their conduct has been more for the selfish views and pro-

fit of the fellows, than the just and important interests of the community :

Your Petitioners submit further, that these objects have been artfully promoted by dividing physicians into fellows and licentiates, in direct opposition to the Acts of Parliament and Charter of Incorporation :

By this palpable infringement Oxford and Cambridge graduates have acquired a preponderating influence over the rest. Not satisfied with engrossing all the honours and advantages of the college, the fellows have contrived to burthen the degraded physicians with extravagant fines, and a most humiliating confession, upon their bended knees, which both parties know to be false, of their comparative inferiority and unfitness to manage the cure of various diseases :

Upon the distribution of physicians into fellows and licentiates it is worthy of remark that Lord Mansfield observed in 1768, " the licences probably took their rise from that illegal by-law (now at an end) which restrained the number of fellows to twenty; this was arbitrary and unjustifiable; they were obliged to admit all such as came within the terms of the charter; yet it is probable that the practice of licensing was in consequence of their having made that illegal by-law : "

Your Petitioners submit secondly, that by another absurd and vexatious regulation, the college has actually superseded the law of the land. In an Act of the Legislature, dated the 32nd of the same reign, it is provided that, " And forasmuch as the science of physic doth comprehend, include, and contain the knowledge of surgery as a special member and part of the same; therefore be it enacted, that any of the said company or fellowship of physicians, being able chosen and admitted by the said president and fellowship of physicians, may from time to time, as well within the city of London as elsewhere within this realm, practise and exercise the said science of physic in all its members and parts, any statute or provision made to the contrary notwithstanding : "

It would be foreign to the objects of your Petitioners to discuss the advantages and the inconveniences which physic and surgery received, or would now receive from combining the practice of both in the physician; it is enough for your Petitioners to shew that physic and surgery were so cultivated from the foundation of the college, till the above recited Act of the Legislature was superseded and defeated by a private regulation of the fellows, which requires that its members shall wholly abstain from the practice of surgery :

It is well known that the greatest ornament of the college, the excellent Dr. Harvey, practised physic, surgery, and midwifery for many years; he also gave a course of instruction in anatomy and surgery annually at the college; these lectures are dearer to the Englishmen, because through them the cir-

culatum of the blood was first discovered by our immortal countryman :

Lord Lumley and Dr. Caldwell had each of them left a sum of money to the college for this purpose, and Dr. Harvey was one of the early professors appointed to deliver these lectures; it is therefore desirable to know who now receives the sinecure emolument, and why the lectures have been abandoned ?

It is enough for your Petitioners to have shewn that in preventing physicians from exercising surgery along with physic, the fellows have virtually repealed an important statute of the realm :

Your Petitioners have, they presume, clearly proved to your honourable House, in the foregoing detail, that the charter is in itself admirably fitted to protect the metropolis against dangerous and unprincipled pretenders, and to provide the apothecaries shops with genuine drugs :

It would greatly afflict your Petitioners and distress your honourable House to add to this statement the probable amount of lives prematurely destroyed, and the aggregate mass of affliction which during three hundred years have proceeded from the culpable inactivity and carelessness of the college; but recent calamities, fresh in the minds of all who pay the slightest attention to passing events, sufficiently declare the grievous extent and great frequency of evil arising from this source alone :

As the anxiety of your Petitioners is directed more to provide for the future than to condemn the past, they willingly leave the charter, without further comment, to consider the legislative care bestowed upon the country in the same reign; they therefore desire to call the attention of your honourable House to another enactment, which seems to contain matter for grave enquiry, if not for severe reprehension :

In the concluding clause of the Act 14th and 15th of King Henry the Eighth, it is provided, " And where that in dioceses of England, out of London, it is not light to find alway men able sufficiently to examine (after the statute) such as shall be admitted to exercise physic in them, that it may be enacted in this present Parliament that *no person* from henceforth be suffered to exercise or practice in physic through England, until such time as he be examined at London by the said president and three of the said elects, and to have from the said president or elects, letters testimonial of their approving and examination, except he be a graduate of Oxford or Cambridge, which hath accomplished all things for his form without any grace : "

Your Petitioners cannot repress their astonishment that a provision, essential to the public safety, should have remained to this time a dead letter in the statute book, and affirm that the fellows dare not affect to conceal their criminal indifference under the garb of ignorance, because they have repeat-

edly boasted that they possess under it an effective dominion over all the practitioners in England. With such exultations, and the Act of Parliament constantly in view, your Petitioners may reasonably enquire what difficulty hath hitherto prevented them during so long a period from enforcing their authority? Have they been too busily engaged in subduing the great body of London physicians to cast a thought upon the country? Or do they entertain so mean an opinion of the provincial inhabitants of the kingdom, as to think them unworthy of protection? Whatever may have led them to overlook their sacred obligations to the people, and to neglect their most valuable concerns, it is to be hoped will be no longer tolerated:

And your Petitioners humbly pray your honourable House will take into consideration the constitution and conduct of the College of Physicians, and investigate the nature of the charter and Acts of Parliament under which they have claimed to act, and provide in justice to the community at large, and the British physicians in particular, as shall in the wisdom of your honourable House be deemed best:

And your Petitioners as in duty bound will ever pray, &c.

[This Petition was signed by some of the most scientific physicians in London. It was presented to the House of Commons by that uncompromising and efficient member Joseph Hume, Esq. and ordered to be printed.—E.Ds.]

THE LATEST CIRCULAR  
OF THE  
CENTRAL BOARD OF HEALTH.

WHEN we consider the constitution of the Central Board, and reflect that Sir W. Pym and Sir D. Barry (against whose professional characters, as individuals, we have nothing to allege), are the only medical practitioners attached at present to a body which has such terrific influence upon the health, commerce, and medical science of this country; we are by no means surprised at the tenor of the singular manifestoes issued by this Board. If our readers were acquainted with the public conduct of these gentlemen, as British medical commissioners appointed by our government to investigate the nature of yellow fever at Gibraltar, 1828, and the degree of estimation in which their opinions have been, and still are, held in Paris, and by Dr. O'Halloran, Mr. Frazer, &c. they would receive all statements made by them with extreme caution, if not suspicion. We have repeatedly exposed the unwise and impolitic conduct of the government in appointing the prior and the present Boards of Health; and we have clearly proved, that the lazy Fellows of the

College of Physicians, or the well-paid Board surgeons, were unfit to form a National Medical Council for the investigation of a frightful epidemic in the first country in the world. Our strictures and animadversions have been completely verified by events; our predictions literally fulfilled; quarantine has materially injured commerce, but has not impeded the progress of cholera; the excitement of panic by an interested junto has done irreparable mischief, has destroyed thousands of human beings in the United Kingdom, and even extended its inhuman and murderous influence to America, where cholera patients are now deserted and allowed to die unattended on the highways. Such have been the disastrous consequences inflicted upon mankind by the London Boards of Health. Their names will be handed down to posterity among the enemies to medicine and mankind that have appeared in the present century.

We are compelled to make these remarks by the perusal of the following ungrammatical and imperfect document, which would disgrace a medical student of a year's standing. We regret that want of time and space prevent us from dissecting, or rather criticising, every paragraph of the production before us; but we shall content ourselves with a few illustrations, as every one acquainted with the rules of English composition must admit the justice of our sentence. The abuse of capital letters in this document would not be committed by a school boy of ten years of age. The repeated use of the Central Board, as a singular and plural nominative, as the "Board have," "strongly deprecates," is beneath criticism:—

("CIRCULAR.")

*"Council Office, Whitehall,  
9th August, 1832.*

"The Central Board of Health have deemed it advisable to re-issue the Sanitary Circulars relating to Spasmodic Cholera, dated respectively 14th November, 13th December 1831, and 9th May 1832, with the following Alterations and Additions, which in their Opinion have been rendered necessary by the Presence and gradual Spread of the Disease in this Country since October last."

The reason assigned for publishing the alterations and additions is worthy of the Board; "the presence and spread of the disease in this country since October last." But why not publish these alterations during the last eleven months? We leave the reader to solve this question.

*"Public precautionary Measures."  
Against what?*

"1. In order to ensure the Adoption, and realize the Benefit of any System of Sanitary Arrangements in a large Community, the first essential Point is to divide that Community into subordinate Sections, and to form Local Boards of Health; each Board to consist, if

possible, of one or more resident Magistrates and Clergymen, and Parish Authorities, a certain Number of substantial Householders, of one or more Medical Men, and an efficient Secretary.\*

" 2. These Boards should appoint District Inspectors to visit daily, and report upon such Deficiencies as may be found to exist in the following primary Elements of Public Health; viz. the Food, Clothing, and Bedding of the Poor, the Ventilation of their Dwellings, Space, Means of Cleanliness, their Habits as to Temperance,—Prevention of Panic."

The elements of health! What an abuse of language! According to this phraseology the rich can never be sick, as they are always supplied in abundance with the said elements. Transcendent discovery! Allay panic, say the Board, whilst they have diffused it throughout the civilized world.

" 3. It would be most desirable that Flannel Clothing, at least Flannel Belts and Woolen Stockings, should be distributed, and an improved Diet afforded to those who may be found most in need of such Supplies, and who are generally the first attacked in all Communities, in order that they may the better resist Infection, and be enabled to oppose improved Strength and more comfortable Feelings to the Influence of the Disease, should they be attacked.

" 4. The subordinate Divisions of Districts ought to be numbered or lettered, and the Names of the Medical Men attached to, and the Visiting Inspectors employed in each Division and District, should be placarded in conspicuous Places.

" 5. Efficient Arrangements should be made by the Local Boards of Health or other Authorities to obtain the earliest and most correct Intelligence of every Case of Cholera which may occur within their Jurisdiction, and to report the same to the Central Board in London.

" 6. All unnecessary Communication should be avoided as far as possible between the infected and the healthy; and as Space, Cleanliness, and pure Air are of the most vital Consequence, both to the Recovery of the sick Person and to the safety of those about him, the Patient labouring under Spasmodic Cholera should either be placed in a separate, well-ventilated Apartment of his own House, if it afford such Accommodation, and be attended by as few Persons as the Circumstances of his Case will admit, or be induced

to consent to an immediate Removal to the temporary Hospital; or the healthy Members of the Family should be removed to such Building as may have been provided for the Reception of Persons whose Circumstances will not afford the Advantages at Home, of Space, Air, and Separation from the sick."

Is this advice intended to allay panic, or is it not calculated to diffuse it universally, and to dissever all the bonds of affection between relations?

" 7. But the Central Board strongly deprecates all Measures of Coercion, which, when tried upon the Continent, have invariably been productive of Evil. The best Inducements to a prompt Acknowledgment of the Disease having entered a Family, as well as to an early and voluntary Separation of the sick from the healthy, will always be found in the Readiness and Efficiency with which public charitable Institutions attend to the Objects noticed in Par. 2."

The Board no longer sanction the removal of cholera patients into one situation, or surrounding them by dragoons, as recommended by the first sagacious Board.

" 8. It is with much Satisfaction that the Board *feel* themselves authorized to declare, and it will no doubt be highly consolatory to the Public to learn, that under proper Observances of Cleanliness and Ventilation, this Disease seldom spreads in Families, and rarely passes to those about the sick, under such favourable Circumstances, unless they happen to be particularly predisposed by Intemperance, great Exhaustion from Fatigue or Mental Anxiety; Indisposition of any kind, more especially Bowel Complaints."

This paragraph destroys the doctrine of contagion; why, therefore, separate the sick from the healthy?

" 9. When the Circumstances of any Population render it probable that a temporary Cholera Hospital will soon be required, such Accommodation upon a limited Scale should be prepared at once, lest the Want of it should add to the Panic, which the first Cases, when they actually occur, are but too apt to produce.

" 10. The Situations which the Board would recommend for temporary Cholera Hospitals would be, those most detached, insulated, and thoroughly exposed to free and open Air; the Description of House, such as would admit of the most perfect Ventilation and Cleanliness, and the largest Space around the sick.

" 11. When an Individual shall have been attacked with this Disease, and placed under the most favourable Conditions, as already pointed out, both for the Recovery of his own, and the Safety of the Public Health;—the Room or Apartment where he may have been attacked, and from which he may have been removed, should be purified by scrubbing, Lime-washing, free Ventilation, and Fumigation by heated Sulphuric Acid and

\* " When a Community supporting its own Poor wishes to establish a Board of Health, a Public Meeting of the Rate Payers must be called to nominate the Members, a List of whom must be transmitted to this Office, under Cover, " *To the Clerk of the Council,*" for the Purpose of being endowed with the necessary Powers by an Order of the Lords of the Council."

Common Salt, with Black Oxyde of Manganese, or the same Acid with Nitre; or, when these Materials cannot be obtained, by strong Vinegar thrown upon heated Bricks. The Bed, Bedding, and Clothes should be immersed in Water and washed with Soap."

It is an undisputed fact, that those engaged in carrying this recommendation into practice, have generally escaped the supposed infection, which is a strong proof that no contagion exists.

"12. To correct all offensive Smells, Chloride of Lime may be applied; [Query, employed.—Printer's d—l.] but great Caution is recommended in the Use of this Material, its Fumes, continued for any Length of Time, having been found highly prejudicial to Health, more particularly in delicate Persons.

"13. A few steady men, proportionate to the Extent of the District in which they are to act, should be appointed to lime-wash and purify, as above recommended, (under the Direction of Medical Authority,) such Apartments as may be pointed out by the Inspectors of the Local Board."

This is a new duty imposed on medical practitioners. We should like to see Sir W. Pym and Sir D. Barry marching at the head of a corps of plasterers and lime-washers.

"14. Those who die of this Disease, should be buried within Twenty-four Hours, wrapped in Cere Cloth or in a Sheet or Blanket saturated with Pitch or Coal Tar, and be attended to the Grave by as few Persons as possible."

This is a manifest contradiction to paragraph 8. The recommendation is profound nonsense. A body of a cholera patient was buried on the 18th May last, was exhumed and brought into the medical theatre at the Westminster Dispensary, on Friday June 1st, when decomposition had considerably advanced. A coroner's inquest was held on Monday, June 5th. The body had remained in the dispensary for four days; it was surrounded by a considerable number of medical students, yet no one was infected. In addition we may add, that Mr. Dermott proposed to sleep in the apartment with the body, which astounded the affrighted coroner and his enlightened jury. The Central Board, on the contrary, advised Lord Durham to change his clothes, after a momentary visit to his venerable parent, who died of cholera, and to make a rapid flight into the country to escape contagion.

#### *Individual Precautions.*

"15. *Diet.*—No sudden nor extensive Alterations should be made in the usual Modes of living. All Changes of Food, to be useful, indeed, not to be absolutely prejudicial, should tend to render it drier, more nutritive and concentrated. Moderately costive Bowels, the almost invariable Consequence of a regular, invigorating Diet, will be found more

conductive to Exemption from Cholera than an opposite Habit, every thing tending to relax the Bowels unduly, being apt to induce a Predisposition to the Disease.

"16. Avoid, above all Things, overloading the Stomach. Indigestion, however produced, disposes the Body to Cholera. If in easy Circumstances take for Dinner a moderate Quantity of Roast Meat in preference to Boiled, with stale Bread or good Potato, Two Glasses of Wine with Water, or an Equivalent of good Spirits and Water, or of sound Porter or Ale. Eat Garden *Stuff* and Fruit sparingly, and avoid fat luscious Meats. In short, whilst under Apprehension of Cholera, use a dry, nutritive Diet, sparing rather than abundant, observe great Caution as to eating Suppers, for Cholera most frequently attacks about Midnight, or very early in the Morning.

"17. Temperance should be most rigidly observed in every thing. In short, no Means should be neglected which may tend to preserve *individual* Health, for although the Neglect of any or all of these Cautions would not of itself produce the specific Disease called Spasmodic Cholera, yet such Neglect would most assuredly dispose an Individual living in an infected Atmosphere to be attacked by that Disease, who most probably might otherwise have escaped.

"18. *Exercise.*—Moderate Exercise in the open Air, in fine Weather, is conducive to Health; but the greatest Care should be observed by all, more especially by the weakly and the aged, not to carry that Exercise to Fatigue or profuse Perspiration, nor to sit down with wet Feet or wet Clothes. Indeed the most particular Attention should be paid to keeping the Feet dry and warm.

"19. Whenever Aperients may become indispensable, those of a warm aromatic Kind in moderate Doses, should alone be resorted to, such as Two of the Pills, No. 1, or a Tea-spoonful of the Powder No. 4., taken over Night, followed in the Morning by the Aperient Draught, No. 7. What is generally understood by Salts, viz. Glauber's Salts and Epsom Salts, as well as other cold Purgatives, should not be taken on any Account, without the express Prescription of a Medical Man, when Cholera is prevailing at the Time.

"20. The Medical Members of the Board beg to state, that no specific Preventive against Cholera is known to exist, and that the Drugs hitherto offered with this Pretension, in Places where the greatest Ravages have been caused by this Disease, not only did not possess the negative Virtue of doing no Harm, but were found to be absolutely injurious. The true Preventives are a healthy Body, and a cheerful unruffled Mind, but habitual drugging, at all Times improper, is to be deprecated in the strongest

Terms when Epidemic Disease is present or apprehended."

This is a cutting criticism on the specific recommendations of the former Board, who advised certain drugs as preventives.

" *Treatment.*

" 21. No Remedy at all approaching the Nature of a Specific has been as yet discovered for this Disease in its more aggravated Form. In fact, no one Mode of Cure can be usefully employed under all the Circumstances of any Disease. The Symptoms, and Grades of Intensity with which Spasmodic Cholera makes its Attacks, vary with the Conditions of the Subject; its Treatment, therefore, must vary with these Grades and Conditions.

" 22. The leading premonitory Symptoms are spontaneous Looseness of the Bowels, with or without griping Pains; Flatulence, and Distension of the Abdomen, or slight Spasms of the Extremities; Apoplectic Vertigo, with Nausea, Lassitude, Weakness, or various Combinations of these Symptoms.

" 23. *When Cholera is prevailing, Looseness of Bowels, however slight, should on no account be neglected. It is by far the most usual Forerunner of the Disease, as well as the most important, because, in its various Degrees, it constitutes that Stage in which Life may be most easily saved.* When this premonitory Symptom affords Time for distinct Treatment, it may be checked, if mild, by the Draught, No. 8, to be repeated every Second or Third Hour, if necessary, for Three or Four Times.

" 24. But if the Purging be severe, a moderate Bleeding of Ten or Twelve Ounces, or Cupping, or Leeches, if there be local Pain, should be resorted to, and one of the Powders, No. 3, should be given forthwith, to be washed down with the Draught, No. 6. This Dose to be repeated every Second Hour for Three or Four Times, if necessary; the Patient being strictly confined to Bed, with a View to Perspiration.

" 25. A Warm Bath for Half an Hour, followed by rubbing with Flannel or Flesh Brushes; warm Fomentations to the Belly by means of Bladders half filled with hot Water, or Flannels soaked in hot spiced Wine, or in hot Spirit and Water, will afford much Relief.

" 26. After the Diarrhœa shall have been fairly arrested, say for Twelve Hours, a Table-spoonful of Castor Oil, with Ten Drops of Laudanum, should be given, in an Ounce of Peppermint or Cinnamon Water,\* or the Pills, No 1, over Night, to be repeated in the

\* A Dose of Peppermint, or Cinnamon Water may be made by rubbing down Three or Four Drops of the essential Oil, with Half a Tea-spoonful of Sugar, adding Two Table-spoonfuls of Water by Degrees."

Morning, if necessary, with the Draught, No. 7.

" 27. When there are Cramps, a Dessert-spoonful or Two of the Liniment, No. 10, should be assiduously rubbed on the Part affected.

" 28. If there be Nausea or Sickness, without acute Pain at the Pit of the Stomach, give an Emetic of Twenty-five or Thirty Grains of Ipecacuanha in Half a Pint of warm Water.

" 29. When Giddiness and Pain at the Pit of the Stomach are present, bleed as above, and give a Tea-spoonful of the Aperient Powder, No. 4.

" 30. Let the Diet during all these premonitory Symptoms consist of light farinaceous Preparations—Sago, Tapioca, Panada; Chicken Broth and tepid Drinks to promote Perspiration."

*First Stage of the Attack.—Treatment.*

" 31. When the Motions have lost the Appearance of feculent Matter, and have put on that of Rice Water or Gruel, with vomiting of similar Liquids, Spasms, intense Thirst, irregular, slow and weak Pulse, give an Emetic of half a Pint of a Solution of Common Salt, Milk-warm, and as strong as it can be made, with a Tea-spoonful of Mustard Powder. Place a Mustard Plaster, No. 11, or apply the hot Turpentine Fomentation, No. 12, over the whole Stomach, Belly, and Front of the Short Ribs. Give one of the Pills, No. 2, every alternate Half-hour, and in the Intervals One Table-spoonful of the Mixture, No. 9. Let the Patient drink cold Water or iced Water if it can be had, allowing no more than Two or Three Table-spoonfuls at a Time, or Bits of Ice the Size of a Nut may be swallowed whole, to allay the burning Sensation at the Pit of the Stomach. Let Bags or Stockings filled with heated Bran or Sand, or Bladders half full of warm Water, be placed along the Patient's Spine or Sides, and to his Feet. Let him be kept still, if possible, wrapt in warm Blankets, but not oppressed with Heat or Coverings, particularly over the Chest and Neck."

In many of the local cholera hospitals, patients in the formidable stage of the disease have taken several quarts, nay gallons of cold water, and recovered. The Board are well aware of this fact. They are also silent upon other material points of practice, which we have not time to notice at present.

*Second Stages of the Attack.*

" 32. If, notwithstanding these Measures, the Patient should appear to be sinking, the Pulse becoming weaker, the Skin colder, the breathing more laborious, the Individual appearing less anxious about his own Situation, then, in addition to the steady Application of the Measures already recommended, let an Injection be administered, consisting of Two

or Three Pints of Water, as warm as the Hand can conveniently bear, with the Addition of a Wine-glassful of Spirits, to be repeated if thought necessary, at Intervals of an hour."

*Third Stage.*

" 33. When the Pulse at the Wrist has ceased, or become almost imperceptible, with Coldness of the Extremities, and perhaps Blueness of the Surface, particularly of the Lips, Hands, and Feet; irregular breathing, Loss of Voice, Suppression of Urine, ghastly Countenance; although under these distressing Appearances there is but little Room for Hope, our Exertions should not cease.

" 34. At this Stage of the Attack the vomiting and purging will generally have ceased, or at least be much diminished; the Belly will be drawn in, and Pain, Sinking, and Death-like Oppression will be felt about the Heart.

" 35. Let the hot Water injection be repeated, with Three or Four Drachms of the Tincture of Assafoetida, and retained for some Minutes by means of a Napkin.

" 36. Let Mustard Plasters be applied to the Inside of the Thighs and Calves of the Legs, in addition to that on the Belly, which may be removed to the Sides of the Chest or Back; let the Limbs be diligently rubbed with warm Cloths; let small Quantities of light Cordials be given at Intervals, such as a Tea-spoonful of Compound Tincture of Cinnamon, or of Aromatic Spirit of Ammonia, in a Table-spoonful of Water, and let the Treatment ordered for the Second Stage be continued until the Pulse becomes distinctly perceptible at the Wrist."

There is no mention made of the hot air bath, exhausted air bath of Dr. Murray, saline injections into the veins, or a variety of other remedies, well known to those who have had actual experience in treating the disease.

*Stage of Re-action, or Fever.*

" 37. When the Pulse has begun to rise, and the Heat and natural Colour to return to the surface, keep the Patient perfectly quiet, but let him be carefully watched, for a sudden sinking of the Powers of Life not unfrequently occurs at this Period of the Disease. Opiates of all Kinds must now be withheld; and Wine, Brandy, and other Stimulants used very sparingly, and withdrawn altogether as soon as the Pulse and Heat are steadily re-established; when mild tepid Drinks are to be substituted, and the Powder, No. 5, given every Hour, instead of the Medicines hitherto used, should the Bowels be torpid.

" 38. Under this Treatment a warm copious Sweat often breaks out, or a more healthy Discharge takes place from the Bowels, or some Urine is passed, which of all others is the most favourable Sign. When such is the Case, the Patient, with proper Care, will often pass into a State of Conva-

lescence, without further Difficulty or Danger.

" 39. It often happens, however, notwithstanding all our Care, that the Re-establishment of the Pulse and Heat are closely followed by Symptoms of Fever, by some Degree of Stupor, by great Oppression of breathing, by Distension and Tenderness of the Belly; all of which indicate Danger.

" 40. The moment such Symptoms appear, bleed from the Arm, or from the Part most affected, by Leeches or Cupping, to 10, 12, or 16 Ounces, according to the Effect produced by the Bleeding. Reduce the Temperature of the Patient's Room, give cool Drinks, and apply cold wet Clothes or pounded Ice in Bladders to the Head; and give the Powders, No. 5. as already ordered.

" 41. When Convalescence has begun, observe the strictest Care as to Diet. At this Period a full Meal has in numerous Instances brought on a Relapse. Indeed, Animal Food, even in small Quantity, under these critical Circumstances, has often been attended with dangerous Consequences to those just recovering from Cholera. To such, even the mildest Articles of Food should be given in much smaller Quantities and at shorter Intervals than to those in Health; and their ordinary Diet and Habits should be very cautiously resumed.

" W. PYM, Chairman."

[In consequence of our strictures on the drastic purgatives advised on a former occasion, the Board have been sagacious enough to combine aromatics in the following prescriptions.—Eds.]

PILLS, No. 1.—Each to contain Blue Pill, Toasted Rhubarb; of each two and a half Grains.

Oil of Aniseeds, 1 Drop.

PILLS, No. 2.

Calomel, 2 Grains.

Opium, one-sixth Grain.

Camphor, one and a half Grains.

Capsicum, one and a half Grains in each Pill.

POWDER, No. 3.

Compound Powder of Kino, 15 Grains; or

Compound Powder of Ipecacuanha, 10 Grains.

APERIENT POWDER, No. 4.

Calcined Magnesia, Rhubarb in Powder; each 2 Drachms.

Ginger in Ditto, 1 Drachm.

A Tea-spoonful for a Dose.

POWDER, No. 5.

Calomel, 1 Grain.

James's Powder, 2 Grains.

Nitre in Powder, 3 Grains.

The whole for one Dose.

DRAUGHT, No. 6.

Chalk Julep, 5 Drachms.

Compound Tincture of Cardamoms, Mindererus' Spirit: each one and a half Drachms.

Ipecacuanha Wine, 30 Drops.

Oil of Aniseed, 3 Drops.

## DRAUGHT, No. 7.

Tincture of Rhubarb and Aloes, Infusion of Cloves; of each 3 or 4 Drachms.

## DRAUGHT, No. 8.

Chalk Julep, 6 Drachms.

Tincture of Catechu, 1 Drachm.

Tincture of Opium, 25 Drops.

Oil of Peppermint, 3 Drops, first rubbed down with 2 Drachms of Sugar.

## MIXTURE, No. 9.

Mindererus' Spirit, 2 Ounces.

Mint Water, 2 Ounces.

Carbonate of Ammonia, 1 Drachm.

Syrup of Ginger, 3 Drachms.

Sweet Spirit of Nitre, 3 Drachms.

One Table-spoonful for a Dose.

## LINIMENT, No. 10.

Compound Soap Liniment with Opium, 8 Drachms.

Tincture of Cantharides, 2 Drachms.

## MUSTARD PLASTER, No. 11.

Two Table-spoonfuls of Flour of Mustard, with a Dessert-spoonful of Common Salt, mixed with Water into a thin Paste, to be spread upon Brown Paper, and applied to the Part, until Redness, Heat, and Soreness are produced.

## TURPENTINE POMENTATION, No. 12.

A Piece of Flannel, large enough, when doubled into Three Folds, to cover the whole Front of the Abdomen, tightly wrung out of very hot Water, and immediately soaked in Spirit of Turpentine, to be placed on the Belly, and covered with a Piece of dry Flannel to prevent Evaporation; to be left on until a burning Sensation is felt.

## THE

## SPIRIT OF MEDICAL LITERATURE.

## No. 5.

*Importance of Clinical Reports.*

It cannot be denied, that the public at large, by whom our hospitals are so munificently supported, and especially the medical world, are entitled to look to the physicians and surgeons of such establishments for the results of their experience, whether fortunate or adverse, in the shape of a periodical publication. Were such documents regularly furnished by the attendants of British hospitals, as is occasionally done upon the Continent, and thus made available to the profession, a mass of invaluable ma-

terials would be soon accumulated, which would far exceed in value and importance all the isolated papers and cases with which the journals of the day abound.—DR. MACFARLANE.

*Extravasation of Urine into the Corpora Cavernosa.*

A young gentleman, who had a stricture torn, after painful priapism, found the blood flowing from the urethra next morning. From the swelling of the parts, he thought he must have an aneurism of the penis; it was the urine which, escaping from the urethra into the cellular texture, distended the integuments of the penis and scrotum.

SIR CHARLES BELL.

*Treatment of Dystocical Convulsions.*

After the first convulsions, the woman falls into a profound stupor, and every circumstance tends to the belief that the head is strongly injected, and threatened with extravasation. As we have already remarked, nothing is more necessary than to terminate such a labour as soon as possible; and the only means which appears to us to afford any chance, is the section of one or more points of the circumference of the orifice of the uterus.—DELPECH.

*Study and Practice of Surgery in the Tonga Islands.*

No native of Tonga undertakes to practise surgery, unless he has been at the Fiji islands, where constant wars afford great opportunities of becoming skilful; and no native of Tonga would employ a surgeon who had not been thus schooled. Nor would any of them undertake an important operation, unless he feels himself competent to what he is about to perform; and it must be said of them, that they are not rash in their opinions. When a surgeon performs an operation, he never fails to obtain a present from the patient or his friend.

The three most important operations are, *cawso*, or paracentesis tho-



racis; *tocolosi*, or an operation for the cure of tetanus, which consists in making a seton in the urethra; and *loca*, or castration.

*Cawso* is an operation which is performed to allow of the escape of extravasated blood, which has lodged in the cavities of the thorax, in consequence of wounds, or for the extraction of a broken arrow. There are no other instances where they think of performing it. The instruments they use, are a piece of bamboo, and a splinter of shell; sometimes a probe, made of the stem of the cocoa-nut leaf.

WILLIAM MARINER.

#### *Emoluments of a Physician.*

Dr. Lettsom's professional emoluments were very great. It appears that in 1783, he received 3,600*l.*; in 1784, 3,900*l.*; in 1785, 4,015*l.*; and in 1786, 4,500*l.* Had he at this time taken all the fees presented to him, his receipts would have been nearly doubled. From 1786 to 1800 they increased greatly, amounting to not less than 5,000*l.* to 12,000*l.* annually. This was considerably more than his patron Dr. John Fothergill ever received; his highest sum was 5,000*l.* in one year. Necessitous authors, and clergymen of all denominations, and their families, were attended by Dr. Lettsom gratuitously, and they were often assisted by pecuniary donations.—PETTIGREW.

#### *Description of a species of Polypus.*

This animal was alive and vigorous more than a week after I found it. It was fixed on the side of a wooden pipe, which conveyed a small stream of water into a ditch. As it hung, its motion excited my attention, while I was picking some liverwort which grew on the spot. I separated it from its lodgment with the point of my knife, supposing it to be an aquatic plant, and that its motion was occasioned by the water which ran over it. On coming home I put it in a tea-saucer of water to

spread, when, greatly to my surprise, the extremities of its branches or tentacula began to move. The motion gradually increased, till at length the whole animal shifted its place, and frequently extended its arms to the top of the water, curling them in a fine spiral form like a corkscrew. I examined it with a lens of a moderate power, and the brown spots seemed to be lamellæ of a stony kind; hence I concluded it to be one of the crustaceous polypi. I then placed it on a thin plate of glass, and examined it by the fourth magnifier in Cuff's double microscope, when, to my great surprise, I found the whole animal to be a congeries of innumerable fibres, branching out into infinitely fine ramifications, and ending in points. An undulatory motion was visible in all the principal arms or branches, and in many of the smaller ramifications. The brownish spots at each joint, which I had supposed were crustaceous lamellæ, I found to be tufts of fibres, which had other branches shooting from them, so extremely fine, that even under the first magnifier they appeared no larger than a silk-worm's thread to the naked eye. These tufts of fibres are transparent in the smaller branches of the animal, and grew regularly between the joints in each limb or branch. They appeared to be hollow, and in some of the larger ones I could perceive a motion, which I took to be the circulation of some fluid. The smallest touch in moving the animal, I found displaced or broke off some of the finer fibres. I could not find any appearance of a mouth, or distension of the gelatinous parts, as is usual in other species of the polypi, nor any fibrillæ at the extremities. In every thing it had the appearance of a vegetable, except its frequent and vigorous motion. I gave it fresh water frequently; but going one day from home, I found the water had been spilled, and the animal was hanging dry to the edge of the saucer. After this accident it never discovered

signs of life, although I immediately put it into water. RACK.

#### *Coagulation of the Blood.*

The fibrine which becomes solid, is so small, as to amount only to about one-fiftieth of the whole quantity by weight; and since the coagulation is not instantaneous, but a slow and gradual effect, it appears to me as necessarily to follow, that the heat produced must be too slight sensibly to affect the thermometer.

DR. DAVY.

#### *Leeches at Jamaica.*

Leeches are not to be found in Jamaica; and if they are sent there, they soon grow sickly and perish.

DR. WILLIAMSON.

#### *The Brain, the counting-house of the Stomach.*

When we enter upon the intellectual department of the body, we enter upon the region where all the ills, bodily and mental, private and public, real or imaginary, are registered. Here the balance is struck which is to determine the happiness or misery. The brain is not the region where happiness and misery is felt, but *is the counting-house of the stomach, where the intellectual faculties, like so many clerks, are conducting the business, and writing up the books of that enterprizing, though too often speculative concern—the animal appetites and passions.* The stomach is the region where happiness or misery is felt. DR. CROSS.

#### *The Physician.*

The medical science seems to be fast degenerating into quackery. The *grave thoughtful physician has sunk into the busy surgeon with his instruments, and into the smart apothecary with his apron; and operations and doses are without limit and without discrimination the ruling order of the present day.* DR. CROSS.

#### *Prejudice against Vaccination.*

Dr. Rowley introduced to his pupils a poor boy, whose face was swol-

len and much disfigured by a large abscess. He requested his auditors to inspect closely this unparalleled case. "On his cheek you plainly perceive a protuberance arising like a sprouting horn; another corresponding will shortly spring up on the other side, for the boy is gradually losing the human lineaments, and his countenance is transmuting into the visage of a cow." And the cause of this was the poor boy's having been vaccinated. Dr. Rowley published a book against vaccination, in which he gave two engravings, one of a mangy girl, and the other of the ox-faced boy; but he candidly ascribed the sole merit of discovering the metamorphosis to his friend Dr. Mosely, who, he said, had often seen negroes distorted into the appearance of various animals by the yaws. On the tomb of another strenuous opponent of vaccination, Mr. Birch, the following is recorded—

But the practice of cow-poxing,  
Which first became general in his day,  
Undaunted by the overwhelming influence of  
power and prejudice,  
And the voice of nations;—  
He uniformly, and until death, perseveringly  
opposed;  
Conscientiously believing it to be a public  
infatuation,  
Fraught with perils of the most mis-  
chievous consequences to mankind.  
*Annals of Medicine.*

#### CHOLERA AT HARTLEPOOL.

THE disease in this place has been very severe. An express arrived for Dr. Clanny, of Sunderland, early on Monday morning last, who immediately obeyed the summons of the Corporation; and his presence, together with Dr. Haslewood, and other medical gentlemen of Sunderland, soon restored confidence, and in some degree dispelled alarm. The corporation feel the highest obligation to Dr. Clanny, for his prompt, energetic, and useful services in the cause of suffering humanity.

THE

*London Medical & Surgical Journal.**Saturday, September 1, 1832.*PROOFS THAT CHOLERA IS NOT  
CONTAGIOUS.

THERE IS no disease recorded in the annals of British medicine about the nature and treatment of which so much has been written and spoken, nor one upon which such a diversity of opinion exists as the epidemic, very erroneously denominated cholera.— Nevertheless, there is no authentic account of the origin of this frightful malady, and no one who has perused the various essays on this disease can place confidence in the statements of the London Board of Health. We have no Sydenhams or Meads in this age of intellect. Heaven knows there is no lack of writers on cholera, but their statements are so contradictory as to destroy all confidence in them. Without referring to the question of the origin of cholera, we may allude to the treatment, which has varied according to the caprice of the practitioner, and as yet has been useless in the malignant form of the disease. The truth is, it has completely baffled the faculty. The Central Board of Health believe it to be contagious, while the great body of those who have seen the disease hold quite the opposite opinion. It is a remarkable fact, that the government of this country have for many centuries deemed all epidemic diseases contagious, while in vicinal nations this

notion is exploded. The baneful effect of proclaiming cholera a contagious, or a communicable disease from individual to individual, has impeded our commerce, has excited a universal panic throughout the nation, has terrified all classes of society, and inflicted immense injury upon the prosperity, health, and happiness of this and other countries. This monstrous evil originated with the first ridiculous Board, composed of the Fellows of the College of Physicians, not one of whom had seen a single case of Indian, Russian, or Polish cholera, but nevertheless sagaciously assured the government after the perusal of certain papers submitted to them, that the disease was contagious, “having no other means of judging of the nature and symptoms of the cholera than those furnished by the documents sent us.” The President and Fellows of the College, acting on an illegal and insolent by-law, consider themselves superior to military physicians and surgeons, and to the Licentiates of their own body, who (according to the law of the land) are their equals, and in talent their superiors, would not condescend to obtain information from those who had observed the disease in India, Poland, Russia, &c. But the Apollo of the College is, and has been, so entwined about royalty during the last two reigns, and of course about the nobility and the government, that he is looked upon by the toad-eating sycophants about him as a demi-god, whose influence is little short of being omnipotent; and therefore he and his

grovelling understrappers, who never saw one case of cholera, pronounce, *ex cathedra*, that it is infectious, frighten the government out of their senses, and in their alarm, quarantine, the Cholera Act, and the death of thousands, in consequence of the promulgation of manifestos on every wall in the metropolis, and through the best possible public instructors, are the results. The ports of London are closed, commerce is destroyed, every class of society is terrified, every disease is suddenly transformed into cholera, separation of the sick from the healthy is proposed to be enforced by the point of the bayonet, the ties of family and affection are broken, because men, manifestly incompetent to form an opinion of the nature of an epidemic, are, by illegality and corruption, able to mislead a patriotic and a good government.

Such are a few of the effects resulting from the antiquated constitution of the medical profession in this country. The documents referred to by the College, were—two reports made to our government by Dr. Walker, who was sent by our ambassador from St. Petersburg to Moscow; a report from the former city by Dr. Albers, a Russian physician; and a report, with Russian quarantine regulations, by Sir W. Creighton.

Dr. Walker states, that “by far the greater number of medical men think the disease not contagious; refer it to the atmosphere, as every person in Moscow felt, during the time, some inconvenience or other,”

(which lately happened in this country), “which wanted only the exciting cause of catching cold, or some irregularity in diet, to bring on cholera—the opinions in favour of contagion are not fair ones.” One would think this evidence conclusive, but it would not suit our national relish for contagion. Dr. Albers stated, that almost all (the physicians) at Moscow maintain the cholera “not to be contagious.” Again, “all those who stand up for contagion have not witnessed the disease.” Sir W. Creighton, who had not seen the disease, declared it to be contagious, though the medical committee in Russia were non-contagionists. Such was only a part of the evidence submitted to the Collegiate Board, contrary to which they decided on the 9th of June; but on the 16th they wished, as well they might, to reconsider their unwarrantable decision. They also examined some army surgeons who had treated cholera in India, but as all, except Dr. Daun, were not contagionists, their evidence was overlooked. Had the Board taken the Indian Reports from their bookshelves, or referred to valuable Reports of the Army Medical Office, they would have found nineteenth-twentieths of those who made the reports, against contagion. But his Majesty’s Most honourable Privy Council were in favour of contagion, and the crawling courtiers about the College found it their interest to agree to and countenance any notion issuing from the powers that be. The Board now published certain

documents, but suppressed those forwarded by Dr. Hemmet from Dantzic, because opposed to contagion; and that of the British consul at Riga, because it stated "the fact of non-contagion being determined. *The statement of fifteen labourers being attacked while opening a pack of hemp is a notorious falsehood.*" Dr. Lefevre, of our embassy to Russia, declared the cholera non-infectious, and that the contrary reports were decidedly false. Dr. Zoubkoof, of Moscow, attested, that he observed with astonishment, the soldiers and others who handled the sick, held their heads while vomiting and, finally, buried them, were never affected. Mr. Searle confirmed this important fact, in his account of the disease at Warsaw, and said, that though there were thirty attendants, one only, a drunkard, who had been stripped and compelled to sleep on a cold floor, was attacked; while Dr. Londe and his five colleagues, who formed the French commission there, declared the same thing to their own government, and were unanimous in opinion that cholera was not contagious. In further proof of the truth of this conclusion we can add, that, on the 10th of October, the Emperor of Austria issued a proclamation to his subjects, stating, "that he had committed an error in adopting the vexatious, and worse than useless, quarantine and cordon regulations against cholera, which were more calamitous than the disease itself, and that he was obliged to enforce them in some places in consequence

of the opinions still existing in the dominions of some of his neighbours, for otherwise his commercial relations would be broken off."—*Austrian Observer*, Oct. 12. Our government have since removed quarantine, but continue the doctrine of contagion in the interior of the kingdom.

The statement of M. Esquirol as to exemption of insane persons from cholera attacks, is not verified in London. At the Bethnal-green lunatic establishments, called the "Red House" and "White House," upwards of one hundred cases of cholera have occurred since the 10th of June last. The history of the progress of cholera in these establishments is highly illustrative of the important fact to society, and so often brought to the notice of the public by us, viz. the spontaneous origin of cholera, and its not possessing the property of being communicated directly or indirectly from the sick to those who attend them, or are near them. The two establishments mentioned, although adjoining, are completely separate as to officers, attendants, &c. There is a doorway for communication on particular occasions only, in the high wall dividing both houses. In each house there are males and females of different classes. The first case was that of a woman in the Red House, who, from her unfortunate state of mind, had been long confined within the walls, and in whose case there was no possibility of tracing the source of the disease to her communication with any other person labouring under it. When it was ascertained that the disease ap-

peared in the Red House, Mr. Beverley, the medical gentleman in charge of the White House, felt himself bound to adopt the "precaution," as it is termed, of cutting off most perfectly all communication with the building in which the first cases occurred. Not only was the occasional communication of officers and attendants, through the door mentioned interdicted, but this gentleman had even the windows blocked up which overlooked the yard of the Red House, notwithstanding which, cholera appeared among the women under his charge; in a little time after among the men of the Red House, and lastly among the men of the White House. While this was going on to the extent mentioned, *not a single medical man who has been in contact with the cholera patients—not a single nurse or attendant of any kind in the hospital about the sick—no burier of the dead, &c. &c. has been attacked with the disease up to the present time, when only a patient or two are under treatment.* Here we must notice the curious physiological fact observed at this hospital, of the restoration of reason in the patients while under grave cholera symptoms. The liberality and gentleman-like conduct of the zealous medical men in charge of the Bethnal-green establishment, are calculated to advance the interests of science, and of humanity; but from the extreme secrecy observed in another lunatic establishment near the metropolis, in which the cholera has prevailed, we have no means of ascertaining whether the germs of the disease had been

carried there in a snuff-box, or other convenient vehicle.

Of one thing the public may rest perfectly assured that, as to attendants on cholera patients, a similar result to that which has been just stated respecting Bethnal-green, took place in the Grenadier Guards in the Tower;—for, among the medical men in constant attendance on, or who paid occasional visits to the thirty cholera patients whose treatment has been lately referred to, in a medical journal, by Mr. Harrison, surgeon of this battalion, not one has been attacked with the disease:—of the military officers who paid the hospital visits of duty, or of kindness, towards their men, not one was attacked:—*of the several (indeed we may say many) men in constant attendance day and night,—rubbing the patients, &c., or on occasional duty only, and whose names may be obtained, not one has had cholera.* The same immunity of medical men, nurses, &c., in attendance on cholera patients, has been observed in another Battalion of the Grenadier Guards, in which cases have occurred occasionally since the 15th of January last, the day on which John Webb, of that regiment, was (as has been admitted by the gentlemen who treated him) attacked with *the true cholera*; although, not being able to couple this guardsman's attack with a Sunderland ship, the case, like those of several others, was blinked by a clique,

"With that low cunning which in fools supplies,  
And amply too, the place of being wise."

We could go on enumerating at the

Aldgate Hospital, and at many other points, the instances of the total exemption from the disease, of attendants on cholera patients. We could in private families quote the many instances of its not going beyond an individual case, besides those of which took place in the houses of Lady Anne Windham—of the Archbishop of Canterbury — of the Honourable Mrs. Smith—of the Honourable Mr. Scot — of Sir James Macdonald — of Lord Holland, &c. &c. We could shew the perfect untruth of the tale about a person having taken cholera in consequence of having worn some of Lady Blane's clothes, who died of that disease. Nobody can be fool enough to suppose that attendants on cholera patients should remain exempt from the disease, if they happen, in all respects, to be under similar circumstances with those who we see attacked without any communication with those labouring under the malady. If we have either dissipated persons, the outcasts of society, performing the office of nurses, or if we have but those wretched debilitated persons attempting to perform a duty which, in such a disease as cholera, would tire out four healthy persons, what, in either case, can be more probable than that such attendants will be attacked during the epidemic influence. If these things be considered fairly for one moment, and if, along with these things, it be considered that, according to any conceivable doctrine of chances or probabilities, we must, among many thousand events of a particular kind,

expect a certain number of coincidences, which it would be utterly illogical to admit to be the *consequences* of certain assigned causes; and therefore, in the *few* instances which can be adduced of healthy, robust, and temperate persons being attacked with cholera, though not over-worked, while in attendance, it would be bad logic to assign that attack as produced by the attendance on the patient, when we see so many thousands attacked who *are not near* patients, and, on the other hand, the whole mass of attendants only attacked in their due proportion to the rest of society.

The crooked policy adopted on the outset of the question of contagion in this country now recoils upon us, as is felt in our commerce. This, however, though a matter of high importance, is not the worst of extremely foolish or extremely wicked council; for besides the atrocities occurring in this country of individuals labouring under disease being deserted even by their own relatives—of persons being suffered to remain unaided in the streets, and refused, subsequently, admission into hospitals—of the police even having, as we are informed, directions to avoid interfering—of the clergymen of the land not only declining to administer Christian duties to the sick, but absolutely, as we see, most absurdly and injuriously closing their places of public worship—all which reduce us to the level of the most barbarous countries. Add to this the abandonment, *en masse*, on the highways in America, of the emi-

grants and others afflicted by the disease, and an idea may be formed of the steps infamously adopted in this country to favour a false doctrine, while the *elite* of the profession in Paris adopted the honest, and manly, and scientific conclusion, after ample observation, that the disease was not contagious.

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SUGGESTIONS  
RESPECTING THE  
CAUSE, NATURE, AND TREATMENT  
OF CHOLERA.

By JOHN PARKIN, Esq. E.I.C.S.

PARAGRAPH 1. From an attentive observation of the course this epidemic has taken, in those places and countries which it has hitherto visited, I have been induced to draw the conclusion, that a noxious matter or poison, being generated in the earth, has been diffused in the different springs\* in such situations, and that this matter, being conveyed into the stomach with the fluid in question, produces that train of symptoms which, commencing in this organ, afterwards extends, with more or less rapidity, to the rest of the body.

2. Being thus conveyed into the system, its primary effect is, I apprehend, that of an irritant acting on the living membrane of the alimentary canal, with which it is in contact, and producing those symptoms which mark the onset of this disease, as nausea, burning heat, and pain at the præcordia, vomiting, diarrhœa, vertigo, and cramps; effects which it appears

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\* According to the view I have taken as to the source of this disease, it appears reasonable to suppose that the *filtration* of the suspected water through charcoal, or exposing this fluid to the action of carbonic acid gas, or some other disinfecting agent, might be the means of neutralizing it of the poison in question, and thus prevent its entrance into the system by this channel.

to me are only to be attributed to a cause acting directly on this part of the body.

3. Its secondary action, it may be presumed, is that of a sedative, manifesting its influence on the ganglionic or sympathetic system of nerves, and through them on various and distant organs with which these nerves communicate, and to which they belong.

4. I am also led to believe that, at a period varying in different individuals, this matter or poison is absorbed, and carried into the circulating system, and that when so absorbed, it acts directly on the blood, producing a change in the usual affinities that hold the different and component parts of this fluid together, and, as a consequence of this change, causing or allowing a separation of those substances which afterwards appear to be eliminated or thrown out from the circulating mass.

5. It has been ascertained that no carbonic acid exists in the expired air of patients labouring under this disease, and it also appears that the caloric, which according to the theory of Dr. Crawford, is given out by the union of the carbon of the blood and the oxygen of the atmosphere, is not evolved. I would ascribe this want of the usual formation of carbonic acid and non-evolution of caloric, to the presence of a poison in the circulating system and its immediate action on the blood itself, as well as to its influence, direct or sympathetic, on the respiratory nerves, in consequence of which the temperature of the body becomes lowered in proportion to the intensity of the cause thus operating on the respiratory process.

6. It being allowed that carbonic acid is given off from the surface of the body, and that it exists in considerable quantity in the alimentary canal: to a secretion from the Mning membrane, its presence, in the latter situation, ought, I think, to be attributed. If so, to what purpose it may be asked, has nature destined the gas thus furnished to this important part



of the animal economy? In order to counteract, I would reply, by its well known antiseptic qualities, the injurious effect of any noxious or poisonous matter that may be taken into the stomach, either with the ingesta, or by any other means. In the disease in question, however, I consider that for want of the usual, or a sufficient quantity of this agent, or on account of the direct action of a poison on the vessels and nerves of the alimentary canal, preventing the secretion taking place at all, this noxious or poisonous matter, being introduced into the stomach, will be thus left to exert its baneful influence without control, unless carried off by nature or art; or unless an antidote is found capable of counteracting its action on the living body.

7. This antidote, I should say, not only as a consequence of the conclusions to be drawn from the theory adduced above, but also from the result of some practical trials, will be best found in that substance which nature has herself furnished the system with, but which in the disease in question, appears to be incapable of performing its allotted offices in the animal economy, or of counteracting the noxious effect of this poison on the human frame.

8. In order therefore to supply the system with an agent, which, by its chemical union with this poison, may render it inert and innocuous, as well as to furnish an additional quantity of that substance which will, by its combination or combustion with the oxygen of the atmosphere, raise and restore the diminished and lost temperature of the body, I have been induced to try the employment of carbon in this disease, and now recommend it to the attention of the profession as an agent capable, it is considered, of fulfilling these several and various purposes and intentions.

#### TREATMENT.

The following is a brief outline of the manner in which I have employed this remedy in its simple and compound forms.

In cases where there is any irritability of stomach or vomiting, carbonic acid is the form which should be had recourse to. The aerated soda water, or saline effervescing mixture, will offer a ready and convenient mode of obtaining it in ordinary circumstances. It should be given every ten minutes, and repeated, notwithstanding its rejection by the stomach, until some benefit is derived from its use.

When diarrhœa, either fœulent or serous, is present, in addition to the above, and as soon as the state of the stomach will allow of it, recently prepared charcoal, in drachm and two drachm doses, should be administered every half hour, in the first stage of the disease; while, in the collapsed stage, this substance may be given to as great an extent as the stomach will bear. The effect observed, in the use of the charcoal, under these circumstances, has been its checking the frequency of the evacuations, and ultimately changing their character from serous to fœulent.

In the collapsed stage of the disease, carbonic acid, in large and frequently repeated doses, is what I would advise, and for this purpose, water, artificially impregnated with the gas, is the most desirable mode of administering it, possessing, as it does, advantages of some consideration, being free from the presence of any purgative or neutral salt; while its immediate effect on the stomach and system is also different, being more exciting than when given in the other forms. When it cannot be obtained in this shape, the saline effervescent mixture, made with the carbonate of ammonia, is what I should give the preference to, both in this and the diarrhœal stage of the disease.

In the consecutive fever, the above remedy, in either of these forms, promises to be of peculiar benefit and advantage.

I have now only to state, in conclusion, that it is not intended, by

the above plan of treatment, to prevent, or entirely supersede, the administration of all other remedies at present resorted to in this disease, still less is it wished to interfere with the adjuvants employed at the same time, as warmth, friction, &c. With regard to stimulants, they will, of course, be given as the depression of the vital powers, or loss of nervous energy, may seem to require. The addition of an aromatic stimulant to the carbonic acid will be advisable, and in general necessary.

## REMARKS.

From a consideration of the theory I have advanced, as to the cause and nature of this malady, it will be readily understood how, if this theory is correct, many of the medicines now employed may still be found beneficial adjuvants to the remedy proposed, at the same time that it elucidates the *modus operandi* of what are sometimes considered opposite and different plans of treatment.

Thus, in the commencement of the attack, and before the poison has passed from the stomach, an emetic, by dislodging it from this organ, may, in some cases, prove the means of arresting the farther progress of this malady.

After it has entered the intestines, the administration of a purgative may not only remove the matter from its situation there, and with it the local symptoms and effects, but also prevent its absorption into the system.

When, however, the poison has been absorbed, then the administration of mercury, from the well-known power of this medicine in increasing the different secretions, may sometimes cause the ejection of this matter out of the system, by the natural outlets for the discharge of various substances from the blood.\*

\* Allowing that cholera is caused by a poison, and that this poison enters the system through the stomach, venesection, from its acknowledged effect in favouring absorption, would seem to be a doubtful, if not hazardous, expedient, so long as this matter remains in the *primæ viæ*.

Venesection, hot air baths, and other means resorted to for the promotion of perspiration, receive a similar elucidation, and may be employed for the same purpose.

In consequence of the escape of the serous part of the blood, and with it the salts which it holds in solution, alkaline and saline medicines, when given at this particular stage of the disease, will, as may be supposed, prove of benefit, especially when accompanied with plentiful dilution.

## CASE OF

RETENTION OF A FŒTUS, AND  
PORTION OF PLACENTA.

By DR. TUTHILL, *Medical Staff, Dublin.*

[For the particulars of this case, he desires to acknowledge being indebted to Surgeon Shorland, 96th Regt. whilst at Halifax, Nova Scotia.]

JANE FINNEY, aged 19, the wife of a serjeant of the 96th regiment, a young woman of a *nervo-sanguineous* temperament, in consequence of a sudden fright in the beginning of January, 1828, began to feel labour pains about a month before her computed time. Having always enjoyed good health, except suffering occasionally from slight ailments, attendant on her pregnancy, she did not apply for assistance until after four or five days, when the pains became so violent, as to induce her to send for Mr. — of —, whom she had engaged to attend her.

Mr. — recommended the adoption of means to delay the labour to the regular period, and accordingly bled her twice on that day, and administered medicines to produce the same effect. By these measures, and the debility consequent on the large abstraction of blood, the pains were suspended for about forty-eight hours; they then recurred with more violence, and in the course of another forty-eight hours the labour terminated, on the 14th January, about ten

o'clock at night, in the birth of a small female child. The pelvis being rather small, though not otherwise ill-formed, and the breech the presenting part; the body was excluded, as she conceived, more than an hour before the head could be extracted. At this time Mr. — was urgently required by another patient, and left Mrs. F. in charge of the nurse, during about five or six hours that he was absent; the head was extricated by the return of the pains, and the aid of the nurse; the child, from the long detention of the head, being *still-born*. The placenta not following so soon as was desired, was also rather forcibly extracted by the nurse, as was inferred by the violent pain consequent on her pulling at the funis umbilicalis; a copious flow of blood succeeded to this operation, and reduced her to almost the lowest state of debility; she was herself insensible to what was passing, but has since been informed, that more than six hours elapsed before the attendants could venture to remove her, or to change the soiled linen. Mr. — returned about the time that she was beginning to recover, and conceiving that all was over, he merely recommended her being kept quiet, and said she would do very well. Shortly after his visit the pains returned as violent as during any period of the labour; these being considered by the nurse as the usual after pains, were partially relieved by the repeated exhibition of opiate medicines during the first three or four days; at the expiration of this time, the nurse finding the body continuing nearly as large as before the labour, mentioned the circumstance to Mr. —, who, after examining his patient, said, that possibly something might have remained in the uterus, but that it was then too late to attempt extracting it, and that it would come away in the course of a short time. From this time her sufferings were great, from the frequent recurrence of violent pains, and a constant discharge from the vagina, of a dark green fetid fluid; at the end of

four or five months, as nearly as she can recollect, a large mass, apparently of flesh, came away; notwithstanding this, the pains and discharge continued, and compelled her to be in almost constant attendance on Mr. — for relief, until she embarked with her husband, on the 14th May, 1829, for Halifax, Nova Scotia.

On board the transport she suffered greatly from sea sickness; this, by the violent straining, had the effect of expelling from the uterus several large masses, but from her situation their nature could not be ascertained. She arrived at Halifax in a very debilitated state on the 5th July, and shortly after applied to me for assistance.

After hearing her statements, I examined the state of the uterus, and found it enlarged and hard, the os tincæ was rather dilated, and effectually stopped up by a broad bone, which could not be removed, nor would allow of a finger passing it. She had stated that the discharge, though still constant, was much diminished in quantity, except at the periods of menstruation, when a large quantity of fluid accumulated in the uterus, and frequently from a sudden motion of the body, or when lying in bed, would burst forth with violence, and occasionally bring with it small pieces of bone. In this manner, after a delay of a few days, this bone came away, as did subsequently several smaller ones, with comparatively but little pain. By February, 1830, nothing appeared to remain in the uterus, though, on examination, its orifice was hard, and apparently in a scirrhus state. In the month following she had acute pains in the uterus, extending to the right side, for which she required bleeding and antiphlogistic treatment. Subsequently, by the use of tonic medicines, a nutritious diet, and moderate exercise, she regained her strength, and recovered, in a great manner, her former healthy appearance. The uterus must also have returned to its natural state; the menstruation did not ap-

pear to have been regularly established, as she proved to be pregnant in the month of July, 1830, and in March, 1831, after a labour of about fifteen hours duration, which proceeded in the usual manner—she was delivered of a female child, small, and apparently not at its full time, which survived its birth only twelve hours. Since that time she has had tolerably good health, and is now (Sept. 1831) about three months advanced in her third pregnancy.

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## ON FEVER IN GENERAL.

BY C. J. B. ALDIS, A.B. M.B.

FEVER is the most frequent morbid condition of the human body, attacking both sexes, and common to every age and climate; it has been divided into idiopathic and symptomatic. The general symptoms of idiopathic fever are—preternatural heat, succeeding a sensation of cold; increased frequency of pulse; languor; lassitude, with pain in the head, back, and limbs; depraved state of the senses; anorexia; alteration in the urine; skin discoloured; frequent and anxious respiration. These are the usual symptoms, but others occasionally appear. It has been stated by some authors that they have found chilliness, frequency of pulse, and increased heat always occur during the course of every fever; but the frequency of pulse does not always happen, and the increased heat, though necessary to perfect a febrile paroxysm, may be absent for some time.

It is difficult to define a disease and give a short account of the character, which will embrace every variety of its appearance; still we must consider a knowledge of the varieties important, in order to render the diagnosis availing. The paroxysm of an intermittent fever is considered a complete example of febrile action.

### SYMPTOMS.

*Cold Stage.*—Lassitude; debility; frequent yawning; then sense of cold,

especially along the back; rigors; vomiting; slow, weak pulse, and frequently irregular; respiration difficult, sometimes accompanied with cough; urine nearly devoid of colour, smell, or sediment.

*Hot Stage.*—Increase of heat; full and hard pulse; restlessness; thirst; dry, furred tongue; flushed countenance; occasionally delirium; urine high coloured, though without sediment.

*Sweating Stage.*—Copious perspiration breaks out over the body; abatement of heat; respiration free and nearly natural; less thirst; urine, with a lateritious sediment, and frequently sleep, from which the patient wakes with most of the functions restored to their ordinary state. Several arbitrary terms have been employed in the division of fevers, which are certainly useful for the student, but many of them are too vague to render the diagnosis certain. Among the various divisions are—1. Endemic, epidemic, and sporadic. 2. Marsh and contagious fevers. 3. Inflammatory, bilious, nervous, putrid, and malignant. 4. Intermittent, remittent, and continued. The last division is the most commonly used. There are also various denominations of fever, as fever with congestion in the head, lungs, stomach, or intestines.

The general causes of fever are divided into remote and proximate. The remote are also separated into predisposing, as habit of body, passions of the mind, &c.; and exciting, as intemperance, grief, fear, anxiety, &c.

The doctrines regarding fevers are innumerable; the proximate cause up to the present time is not well comprehended. It was the opinion of many authors, that "fever was an effort of nature to expel something injurious from the body."\* This opinion, though taught for many years, has fallen into disrepute among

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\* *Febres intermittentes ad longevitatem disponunt.*—BOERHAAVE.

later practitioners. Boerhaave assumed lentor of the blood as a proximate cause of fever, but afterwards admitted the agency of the nervous system. The phenomena of this system came more under the notice of Hoffman and Cullen, who built their hypotheses upon it with great ingenuity. Hoffman attributed the phenomena of fever entirely to nervous disturbance, and Cullen to spasm of the minute vessels. Dr. Brown's theory was founded on the idea of increased and exhausted excitability; M. Broussais and Dr. Clutterbuck referred their proximate cause to increased action in some particular organ; the former to inflammation of the mucous membrane lining the stomach and intestines, but more particularly the stomach; the latter to inflammation of the brain. The proximate cause has also been placed in the liver, spleen, &c. The liver has been found gorged, and the gall-bladder full of black bile, in persons dying from ague; but this cannot explain the proximate cause. The French deny an idiopathic form of fever, yet in many instances the fever precedes the local affection. Broussais more particularly states, that the appearance commonly met with in the mucous membrane of the intestines after death from fever is the cause. Also Louis, Andral, and Bretonneau, with Cruveilhier, think that it forms an essential part of the fever.

13, Old Burlington-street,  
August 25, 1832.

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#### CASE OF CHOLERA.

BY W. DOBSON, PIMLICO.

Mrs. TYLER, ætat. 36, residing in Harrison-street, Vauxhall-road, a stong, healthy, and temperate woman, in comfortable circumstances, not subject to disordered bowels, was attacked on the 1st August, about an hour after a dinner of beans and bacon, with griping of the bowels, diarrhœa, and nausea, but not vomiting. These

symptoms continued progressively increasing until the following morning at five o'clock, when spasms of the legs and abdominal muscles supervened of the most excruciating kind, with coldness of the surface, first commencing in the extremities, then extending over the trunk. I saw the patient at seven A.M.; she was prostrate in bed, and unable to move her hand, the debility was so extreme; the countenance was shrunken and the face of a purple hue; the eyes sunk in their orbits, and had a glassy appearance; the fingers were remarkably shrivelled, and of a dark-colour; the surface uniformly cold, "as cold as marble," with the exception of the præcordial region; the cramps had ceased; a gruelly-like fluid of a light colour was passing from the bowels involuntarily; the radial arteries imperceptible, and the beat of the carotids exceedingly feeble; the tongue cold; the voice had that character so peculiar in cholera. Every symptom indicated that dissolution was at hand, and would occur unless prompt and energetic measures were adopted. Heat was applied to the surface, and the whole body rubbed constantly with warm turpentine; large quantities of warm brandy were given, and calomel ℥j. with opium gr. ij. every half hour.

Nine A.M. Some warmth on the surface; cramps had recurred slightly; vomited once; pulse at the wrist just perceptible; bowels still much relaxed; an enema was administered, composed of two ounces of luke-warm starch-gruel and tincturæ opii, ℥ss. The breathing being laborious, nitric acid was freely applied to the cervical portion of the spine; the respiration was instantly excited. The cal. et op. to be given every hour.

At eleven still improving; less discoloration of the skin; debility intense. Spt. ammon. arom. was given frequently. The patient was seen every two hours during the day, and a gradual amendment was observable each time.

At ten P.M. Pulse eighty and small;

surface much warmer; complains of irritation of the skin from the turpentine. Calomel, gr. x. with opium, gr. i. every three hours. Farinaceous substances, with small quantities of brandy, to be taken frequently during the night.

3. In a favourable state. Pulse much improved; slight ptialism; surface warm; thirst, with dry tongue; bowels relaxed; evacuations bilious; powders to be omitted. Ordered a cretaceous mixture.

4. Mouth fully affected with the mercury; great debility. Quinine and port-wine every four hours; avoiding too much excitement.

5. Decidedly better.

6. Nearly convalescent.

8. Recovered, with the exception of soreness of the mouth.

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#### ON INJURIES OF THE BRAIN.

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*To the Editors of the London Medical and Surgical Journal.*

GENTLEMEN,

A FEW years ago my attention was directed to the subject of wounds of the dura mater, as they are called; and though it is better understood now than it was at that time, yet as there has been no corresponding improvement in practice, such cases are not the less fatal. As I do not now enjoy opportunities of witnessing such practice, and moreover have been disappointed in my expectation of further opportunities, I beg to trouble you with my reflections, in the hope that those more favourably situated than myself may make some attempts at improvement in this interesting department of surgery.

The brain is exposed by a sabre wound, a ball or a piece of bone is otherwise chipped off, a fatal termination happens in three ways; 1st, inflammation, extending from the wound over the membranes of the brain, and producing effusion of serum and pus; 2ndly, inflammation, suppuration, sloughing, and dissolu-

tion of the brain; 3rdly, hernia cerebri. The first is the most frequent termination, and that about which I am anxious to direct attention.

Notwithstanding the number of parts injured, such a case is generally classed under the head of "wounds of the dura mater," as if there was something in the functions or structure of that membrane to account for the danger of the case.

This misnomer I apprehend to be the reason why the subject has been so long involved in mystery. Probably this name was first given at a time when anatomy was not much cultivated, and has been continued ever since without examination; for the slightest reflection will shew the relation that such a case bears to wounds of the pleura, peritoneum, &c. and that it is the wound of the arachnoid, the opening made into a serous bag, in which the danger consists. It was not understood why some patients recovered, and others died after wounds of exactly the same description. Judging from the instances of the pleura, peritoneum, &c. I attributed the inflammation to the non-closure of the wound of the serous cavity.

For confirmation of my opinion I performed a rude experiment on a whelp. I punctured the brain, and brought away some brainy matter on the instrument. Pretty confident that the animal would survive the injury, if not interfered with, I left it alone, and found in the course of a week the wound nearly healed. I now killed it, and to see the process of reparation, sliced off a portion of the cranium around the wound, together with the corresponding portion of the brain. The arachnoid covering the brain was united to that lining the dura mater by a band of lymph, by which the portion of brain was suspended from the bone. There was a slight increase of vascularity in the neighbourhood of the wound, but further than this there was no appearance of inflammation. In this manner then was the cavity of the

arachnoid closed, and here was to me an explanation of certain ascertained facts, viz. that balls or splinters of bone sticking fast in the wound are better left alone;—that recoveries are more numerous when the brain is implicated. In all these cases the opposite surfaces of the arachnoid are placed in contact, and in the case of the ball or splinter of bone are so retained during a sufficient length of time for adhesion to take place. The breach in the membrane is the cause of the inflammation, and all our means must be directed to its closure. I have stated what takes place in recoveries, and will venture to say, in spite of my want of experience, that in all fatal cases the wound in the sac will be found open; and this, I repeat, is the main object to be kept in view throughout in these cases. If we suffer our attention to be drawn away to the prevention of inflammation by common means, in the same proportion do we remove the chance of recovery.

If called to a penetrating wound of the abdomen, every care by bandage, compress, position, &c. is taken to procure adhesion; and though the similarity of the cases is evident, yet we observe no attempt made towards closing wounds of the head.

Taking this view, it will appear that the treatment commonly adopted, viz. bleeding, raised position of the head, &c. is positively injurious; nay, it is scarcely too much to say, that the very means in common use intended to prevent this fatal inflammation, are the very best adapted to insure its occurrence. For the volume of the brain very much depends upon the quantity of blood contained in its vessels, and the quantity is variable according to the position of the head. Then if, in addition to elevating the head, copious bleeding be had recourse to, the brain so far retires within the cranium, that not only are the two surfaces of the arachnoid kept from

uniting, but they can scarcely come in contact, even occasionally.

It will be objected, that we cannot by bandage, compress, &c. approximate the surfaces of the cranium and brain, as in the case of the abdomen; but if we place the head in such a position that the brain shall gravitate and repose upon the wound—if we are not too anxious about elevating the head—and I would add, if we abstain from blood-letting, then will there not be a greater probability of adhesion taking place, and the inflammation so much dreaded in that way be prevented? A certain degree of inflammation is necessary for the process of reparation. Bleeding, besides being injurious in the way already mentioned, would, I conceive, materially interfere with this process. If, unfortunately, the inflammation should spread beyond the limits of the wound, in my humble opinion, the case is not one to be benefitted by blood-letting.

Dr. Stokes has lately recorded cases of peritoneal inflammation, caused by the escape of fecal matter, pus, &c. successfully treated by the use of opium in large doses; and suggests this remedy in a number of similar cases, as inflammation following the operation of tapping in pneumonia, rupture of the bladder, the inflammation following the operation for hernia, and among these I would class the inflammation in question. But, as I have already stated, I have no opportunity of trying either this or that method, and must therefore leave the matter in other hands. Unaccustomed to writing, if I have been obscure in any part, or have advanced any position without sufficient evidence, I can only say that I shall be happy to reply to any notice I may be honoured with by your correspondents.

GULIELMUS.

Aug. 21, 1832.

## Hospital Reports.

## ST. THOMAS'S HOSPITAL.

## GASTRODYNIA.

JOHN WINDER, aged 30, a muscular man, and had been, previous to his present illness, of a good constitution, was admitted, March 1st, into Williams's Ward, under the care of Dr. Elliotson. He was a stoker in a brewhouse, and had been in the habit of drinking a large quantity of porter; he states, eighteen months since he caught cold, and was a patient in this hospital with rheumatism; for this last four or five weeks, about a quarter of an hour after taking his food, he is attacked with acute pain in the epigastrium, instantly followed by vomiting; the whole of his abdomen is hard and swollen, but he experiences no pain from pressure; appetite good; tongue, especially about its posterior aspect, coated with a yellowish fur; bowels open; pulse small and quick, 96 in a minute.

March 2. Extract: stramonii, gr. j. m. n.

6. He fancies himself a little better this morning, but feels rather sick; pulse small, but not so quick, 84; stramonii, gr. iss. m. n.

8. About two hours after dinner, he was attacked with the usual pain, which was succeeded by vomiting, the ejected matter being of a greenish yellow colour; complains of much thirst.

9. Extract: stramonii, gr. ij. m. n.

10. This morning he vomited about two hours after breakfast, which was attended with severe pain; pulse sharp and quick, 100.

11. Vomited three hours after eating.

12. Two hours after eating he was attacked with the usual pain and vomiting.

13. He vomited two hours after eating again to day.

14. Although muscular when he

came in, he is now very thin, especially about his face; no vomiting to-day; extract: stramonii, g. ijss.

20. Has vomited three times since the 14th; pulse small, very quick; acid. hydrocyanic, gt. ij. post prand.

21. Emaciation continues; his cheek bones are very prominent, and a flush may be observed on the upper part of the cheek, which, when examined, was found to consist of a number of small distinct vessels; there is no pain over any part of his abdomen, even with great and sharp pressure; tongue clean; on the 20th and 22d, he vomited about the same time after eating; acid. hydrocyanic, ℥. iij. post prandium.

29. The vomiting continues daily at the usual time, that is, two hours after eating; acid. hydrocyanic ℥. iv.

30. ℥. v.

April 2d. Continues the same; acid hydrocyanic, ℥. vss.

6. From the 2d to the 6th, he has vomited but twice at the usual time after taking food; acid hydro. ℥. vi.

10. Has only vomited once since the 6th; acid hydrocyanic, ℥. viij. post prand; mutton chop daily.

19. He has vomited three times since the 10th; much emaciated; vin. rub. ℥iv. quotidie; pergat c. hydrocyanic acid.

20. Appears very weak.

24. Emaciation continues to increase; great prostration of strength; acid hydrocyanic, ℥. viij.

29. Only vomited once since the 20th; acid hydrocyanic, ℥. viijss.

May 4. The acid was taken after dinner to day, as it had been before ordered, but misunderstood; ℥. ix.

7. Vomiting a little on Saturday, but not since; he thinks himself rather better, although weaker.

8. Acid hydrocyanic, ℥. ixss.

June 4. Has vomited but twice since last report, and makes no complaint but of debility; he takes meat daily, with ferri. sulph. gr. v. opii. gr. ss. vin. rub. ℥v. quotidie.

18th. This morning he felt much weaker and nearly fainted; has vomited only twice since the 4th. On



the 20th, he left the hospital for the purpose of seeing his wife, and died on the following day.

The examination after death afforded nothing to account for the symptoms.

### *Hæmoptysis and hæmatemesis.*

George Veller, aged 30, of a swarthy complexion, who had enjoyed good health until Christmas last, when he caught a violent cold, since which time he has been troubled with a cough, was admitted into Williams's Ward, March 8th; states that on Thursday last he brought up a great quantity of dark blood mixed with his food, which he had taken a few minutes previous; and on Friday morning he again brought up blood of the same appearance, and his stools were of a dark colour.

9. He now gives an account of his symptoms quite different to the preceding, for he states the blood which he coughed up was of a red colour, and that he never noticed his stools. He appears however sulky, and unwilling to give any information; his pulse is small, quick, and sharp; there is a strong impulse of the heart, especially over the epigastric region, and some sonorous rattle over the chest. Dr. Elliotson, under whose care he was placed, ordered him to be bled ad ʒx., and to take plumbi superacet. gr. ij. 4ta quæqua hora.

11. He scarcely answers when spoken to, and appears in a state of stupor; emp. canth. amp. nuchæ.

13 and 14. Passes his fæces in bed; is in a state of stupor, from which he cannot be roused; pupils contracted and insensible; respiration natural; breath very offensive; pulse small and quick; omit plumbi superacetat.

14. C. C. ad ʒxij. nuchæ; et emp. canth. postea; hydrarg. submuriat. gr. iij. 3tis horis, sumend.

15. Remains in the same state; hirudines xvj. temporibus; lotio ammon; acetat. capiti statim.

Between two and three o'clock he appeared somewhat sensible, and took

some food and medicine. In this state he remained until about half past three o'clock P.M. when he was suddenly seized with a fit of coughing; brought up nearly half a pint of dark clotted blood, and expired.

### *Sectio cadaveris.*

On examining the head some effusion was observed under the membranes of the brain, in its surface and base, and at one part some recent deposited lymph; there was also considerable effusion in the lateral ventricles.

The trachea and bronchial tubes were filled with blood, and there was some recent tubercular deposits on the lungs; a considerable quantity of blood was found in the stomach and duodenum; in the former there were some marks like incipient ulceration at the cardiac portion, close to the termination of the œsophagus.

The spleen appeared unhealthy, and there was a scrofulous affection of the mesenteric glands.

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### NOTICES TO CORRESPONDENTS.

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Justice and independence will compel us to notice a certain act of oppression committed by some of the medical professors, which will reflect no credit on the College or the profession, or on our national character. We hope and trust we shall be spared this unpleasant task.

Dr. Murray's reply to Dr. Orpen in our next.

Dr. A.—We are much obliged, and shall attend to the matter next week.

A. J. D. on the London University Hospital is unavoidably deferred.

Improved Raw Sugar.—We shall insert this important communication as soon as possible.

The account of the French and Belgian medical appointments was received too late for this Number.

J. F.—A pupil will be allowed to attend lectures under the circumstances mentioned.

A Georgian.—We have long thought on the matter, and shall attend to it when convenience allows us.

List of Books in our next.

# London Medical and Surgical Journal.

No. 32.

SATURDAY, SEPTEMBER 8, 1832.

Vol. II.

SELECTIONS  
FROM THE  
CLINICAL LECTURES,  
DELIVERED AT THE  
HOTEL-DIEU IN PARIS,  
*During the Session of 1831 - 32;*  
BY BARON DUPUYTREN,  
PRINCIPAL SURGEON OF THAT HOSPITAL.

*The Excision of Hemorrhoidal Tumours.*

THE lower extremity of the rectum is, in many persons, the seat of bleeding tumours, to which the name of hemorrhoids is given. These tumours may exist for life without occasioning any considerable annoyance, but they are often the cause of serious injury, which endangers the life of the patient, and which infallibly terminates in death, if they be not combated. The celebrated Copernicus and Arius sunk beneath hemorrhage, in consequence of rupture of the hemorrhoids. Borden and Benjamin Bell mention cases of issue equally fatal. This fatal termination has been noticed by the ancients, and they have, says M. Dupuytren, proposed different treatments of this affection, and amongst others that of ligatures. Hippocrates, in his work *De Ratione Victus in Acutis*, recommends binding the hemorrhoids with a thick, strong, worsted thread. You should tie, added he, all the tumours, with the exception of one; you should not cut them, but you should hasten their fall by appropriate topical applications. Paul of Egina has given the same directions. Celsus thought that the tied tumours ought to be opened with the nail, or the scalpel. I mention these different opinions, said the Professor, to prove to you that the ancients knew very well the danger of hemorrhoids. Before we examine the remedies employed against these tumours, it will not be irrelevant to describe their nature, to point out their anatomical structure, and the

VOL. II.

cases in which it would be proper to apply the treatment of which I propose speaking in this lecture. Relating to their nature, many opinions have been promulgated. Some, with Montegre, think that the sanguine discharge flows neither from the arteries nor veins, but from the capillary vessels. Laennec and Abernethy considered them to be the result of the formation of new vessels. According to Duncan, Le Dran, Cullen, MM. Recamier and De La Roque, they are formed by the cysts in which the arterial blood is poured. Stahl, Alberti, Vesalius, Morgagni, J. L. Petit, Pinel, Boërhaave, regarded them as dilated veins, or real varices, and such also is our opinion. If we examine, says M. Dupuytren, the composition of hemorrhoidal excrescences, we find that they are divided into external and internal. Internal tumours, covered with a mucus of a violet colour, form in the rectum a sort of partition; they present between them furrows which facilitate their being detached, and which often disappear by an inflammation. The tissue of this membrane exhibits tumefied veins, resembling the heads of pins, which, when an incision is made in them, discharge venous blood, and have a spongy appearance. When the mucus is removed there appear false organized membranes, or cellular tunic, the muscular membrane constituting the external tissue; voluminous arterial branches are often seen on them. External hemorrhoids, which form a sort of crown around the anus, are composed:—1. externally of tumour, the greater part by the rectum, and a small portion of the skin. 2. By the false membranes which often exist on the internal tumours, or in the nervous tissue which seems to extend itself to the *fascia superficialis*. 3. By the dilated veins which constitute the hemorrhoids. 4. By the external sphincter, which encircles the pedicle, and constantly sends fibres to them. 5. By the nervous filaments which extend on the surface; and lastly, by fat, which is sometimes placed between the skin and these tumours. These dispositions being known, let us see, continues the Professor, in what

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cases the disorder ought to be left to itself, or when it should be combated by surgical means. It is evident that it would be contrary to all rules to attempt removing hemorrhoidal affections in cases where the patient is weakened by organic disease of the intestines, of the liver, and especially of the lungs. It is a general observation, that in cases which exhibit pathognomonic symptoms of phthisis, the fatal effects of the disease have been checked for some time by the appearance of hemorrhoids, and that, in consequence of their untimely suppression, the disorder returned with energy. In the last months of pregnancy, or from the efforts of labour, women often have hemorrhoidal tumours; they result, in these cases, from an evident cause, and disappear with it. When these hemorrhoids are not disorganised in their tissue, when there is no hemorrhage nor copious discharge of purulent serosity which would reduce the patient to a state of profound and characteristic anemia, surgical means are not advisable in remedying these accidents, or rather the inconvenience which they occasion; antiphlogistics will suffice for their removal. But when the life of the patient is endangered remotely or immediately—when the annoyance is so considerable as to require prompt assistance, and the hemorrhoids are disorganized, antiphlogistics will not be sufficient; excision is the only remedy, says M. Dupuytren, which will succeed. Disorganized hemorrhoids, and those that require an operation, shall be considered in the following lecture.

These two kinds of hemorrhoids, internal and external, may or may not be met with simultaneously; they form a reunion of tubercles which encircle the anus, some externally and some internally; and this species has been named by M. Dupuytren external and internal hemorrhoids. External hemorrhoids are formed by a circle of round smooth tubercles, of a brownish colour on the outside, where they are covered by the skin, and of a bright red inside where the mucous membrane forms their covering, rarely ulcerated on their external surface, they are on the contrary very frequently on their internal, and from thence arise hemorrhages more or less abundant, purulent, or sero-purulent discharges, which tend to debilitate the patient. Internal hemorrhoids, situated above the anus, and often strangulated by the sphincter, in consequence of their engorgement, or by the prolapsion of the internal membrane of the rectum (a frequent complication in hemorrhoidal tumours) which give rise to the same accidents, and are known by the bright red colour of the tubercles. These two species of hemorrhoids are sometimes present in the same patient.

The individuals attacked by this malady walk with difficulty in the street; stopped every moment by the intensity of the pain, they may be seen with their hands behind

their back, or sitting down on the next resting place, in order to push in their hemorrhoids; others, for the same purpose, rub themselves against walls, but these means only procure them a momentary relief, and a return of pain quickly follows the next protrusion of the hemorrhoids; more or less exhausted by the abundance and frequency of the hemorrhages or sero-purulent discharges, the patients become emaciated, their skin becomes pale, discoloured, wan, like wax; they have the aspect of persons exhausted by other hemorrhages or by abundant suppurations; they very often fall into a state of sadness and deep melancholy; their intellectual faculties become weakened, and they are often found to attempt their lives. Meanwhile the local disorganization progresses, a scirrhus affection of the anus and of the inferior part of the rectum shew themselves, and death will be the termination of their progress, or the result of the abundant discharges, if they be not successfully opposed.

It is then in those cases, says M. Dupuytren, that we must have recourse to operative proceedings; but to which treatment shall we give the preference? To obtain the radical cure of hemorrhoids, we employ in turn compression, ligature, cauterisation, resection, and excision. Let us discuss successively the use of these different means. We may waste the hemorrhoids by compression, but the situation is not favourable for this, and thus it is given up. The ligature, as we have seen, has been a very ancient practice; its inconveniences are considerable, since it exposes the patient to inflammation, insupportable pain, and sometimes to death, as the celebrated J. L. Petit was reported an example. Cauterisation has been frequently practised. It is of considerable utility when united to excision; it causes extreme pain, and may expose to great danger if it be applied to voluminous and extensive tumours, which would require the prolonged action of the actual cautery. Resection has been praised by many practitioners; it consists of shaving the hemorrhoidal tumours with a pair of scissors; but it would seem that a practice that induces hemorrhage, which lets the tumour remain, and provokes inflammation, cannot justify the preference which has been given it. There remains then excision, said the Professor, which we employ with the greatest success.

Let us now consider how it ought to be practised; we will speak afterwards of its inconveniences, its dangers, and the means of remedying them. First, the diagnosis being established, and the operation decided on, the patient should lie on the edge of the bed on his side, or on the knees and elbows, the two legs extended; or it would be better to have one bent strongly on the thigh, and the other extended. If the tumour is internal, the patient is recommended to make violent efforts, as if going to stool, in this manner he will protrude it; and it should

be seized with a large kind of forceps, whilst an assistant raises or separates the thighs, and with a pair of long scissors, the model of which has been given by us, the tubercle will soon be excised. This manœuvre offers very little difficulty.

We have for a guide, adds M. Dupuytren, that we should only excise a portion of the protruding tumour; for if it were taken completely away, the patient would be exposed to severe hemorrhage, and to consecutive contraction of the anus. By this treatment there remains apparently a considerable mass at the verge of the anus, which might seem as if there had not been a sufficient quantity of the hemorrhoids removed; but when cicatrisation takes place, the opening will return to its natural state.

This is also the case in excision of the tonsils. The excision of internal hemorrhoidal tumours is more difficult. To induce an external protrusion in order to be able to seize it, and remove it completely, the patient should be placed sitting on a warm hip bath, desired to make expulsive efforts. As soon as it is protruded he must lie down immediately on the bed, in the position before recommended, and the operator, quickly seizing it, should not give it time to re-enter, but excise it immediately.

Before the operation, M. Dupuytren is accustomed to administer a gentle aperient, and an enema. We will see afterwards what are the motives of these precautions. The excision is not without difficulty and danger, but the difficulties are easily surmounted, and the dangers can happily be prevented by the precautions which are now used.

The entire danger is the hemorrhage that may follow; where the tumour is external the blood spouts out; the hemorrhage is immediately perceived, and is easily stopped by cauterisation. It is to actual cautery that we must have recourse when the tumour is internal; but in these cases the application of the cautery is more difficult, and the hemorrhage may be easily mistaken. What reveals it to the eye of an attentive and enlightened surgeon, is a sensation of heat which the patient experiences in the abdomen, and seems to advance by degrees in proportion as the blood accumulates in the intestines, or he feels colic pains, and always a peculiar sort of pain, a sort of tenesmus. The abdomen is sore to the touch, especially towards the groin and the left iliac fossa. Respiration is difficult; the pulse, at first intermittent and irregular, becomes small and frequent; the skin is discoloured; the face is covered with cold perspiration. The restlessness which the patient at first complains of is quickly succeeded by despair; there is an inclination to vomit or vomiting, with convulsive contractions of the extremities, vertigo, &c.

This accident once known, we must hasten to evacuate the blood contained in the intes-

tines, by directing the patient to make efforts as if going to stool, and by administering a cold enema. These strainings always bring out the wound; and by means of a cautery heated to a white heat, which M. Dupuytren has expressly constructed, and which he calls *cautère en haricot*, or another which he call *en roseau*. The place where the blood flows from should be cauterised, this treatment is always sufficient to stop the hemorrhage; and I have never seen, says the Professor, that any dangerous effects followed. Whenever I perform these operations, I take care to have an intelligent assistant with the patient, who, on the first symptoms of hemorrhage, whether internal or external, applies the cautery, and prevents any danger.

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## SELECTIONS

FROM THE

LECTURES

OF

SIR GEORGE L. TUTHILL.

(Continued.)

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### APOPLEXIA—APOPLEXY.

THIS disease is marked by universal privation of the power of voluntary motion, with more or less insensibility, whilst the action of the heart and arteries remains. The attack of an apoplectic fit may be preceded by symptoms by which we may know that it is likely to occur; or it may come on suddenly, without giving any previous warning, by which we may look for its occurrence.

Dr. Cullen has divided this disease into two species, according to the causes which produce it:—

#### *Apoplezia Sanguinea; or Sanguineous Apoplexy.*

This disease is known by symptoms of universal plethora, and of the vessels of the head in particular. This disease most commonly affects those who are advanced in life, and in some persons it occurs before the middle period of life. It is frequently preceded by symptoms of vascular fulness in the head, occasional giddiness, and drowsiness; and the least thing promoting the flow of blood to the head, or preventing its return, will occasion giddiness. After a time the memory and the imagination are with difficulty excited, and many of the senses lose their acuteness, and the faculties of seeing and hearing become transiently interrupted and as quickly return; dimness of sight, tinnitus aurium, faltering of the tongue, stertorous breathing, and night-mare; these symptoms

will be present, and will vary in different persons, and may be either strong or weak, or combined with one another, or presenting themselves singly; it is rare to see them all together. Sometimes their presence will not be noticed by the patient, and from having been previously quite well, or having had only one or more of the above symptoms, will be seized with a sudden cessation of voluntary motion; the face will become swelled, the blood-vessels turgid, the eyelids half open and rigid, the pupil dilated, the lips and cheeks thrust out, and foaming at the mouth; the hectic will sometimes go off, the patient is unable to swallow, and convulsions affect some part of the body, whilst the powers of sensation and voluntary motion are generally more or less on one side than on another. The patient seldom survives the fit more than four or five hours; where, however, he does survive for a longer period, the sphincter muscles of the bladder and rectum lose their power, and the excrement and the urine are discharged involuntarily; the pulse becomes languid and the breathing shortened; at other times these violent symptoms abate, and the patient survives.

*Diagnosis.*—This disease may be distinguished by the privation of sensible and voluntary motion, and by the continued action of the heart and arteries from paralysis; and by the action of the heart and the absence of convulsions, &c. may be distinguished from a fainting fit. Sanguineous apoplexy generally attacks the young and robust, where there is great plethora of the vessels of the head, and strength and fullness of the pulse.

*Prognosis.*—This disease is most dangerous, and generally either terminates in death, or in a defect of the powers of life; and in some cases paralysis follows the disease. It is a rare occurrence if a patient recovers entirely. When the fit lasts long and the symptoms are severe, and the patient advanced in life, recovery is almost impossible. Where motion in the limbs remain and the pulse is regular, and a healthful sleep comes on and the senses return, then it is possible that the patient will recover and survive the attack.

After death blood is found effused in the brain. Sometimes at the spot where the effusion occurs the brain is very soft, and the vascular part diseased, the cerebral arteries and their branches are generally found congested; and when the blood flows with any great force through these diseased vessels they are likely to become ruptured, especially in old persons. Sometimes the extravasation is only situated on or between the membranes of the brain, which will depend upon their strength to resist pressure. When the patient is not cut off at first, and the attack is followed by loss of sensation in a vertical direction, the extravasation is on the opposite side of the brain to that on which the body is affected.

*Causes.*—The causes of this disease are divided into remote and proximate, and the remote causes into predisposing and exciting. An advanced state of life is more likely to predispose to this disease, and all forms are not equally liable to attacks of sanguineous apoplexy. Those who have large heads and short necks, and indulge in a full diet, intoxication, and an indolent habit, are predisposed to this disease. A copious discharge of blood from the hemorrhoidal vessels may occasion a rupture of the vessels of the brain, long and severe exertion of the mental faculties; whatever causes a fullness of the vascular system. As, for instance, the act of entering suddenly from private life. The exciting causes are of two kinds, those which determine the blood to the head, and those which prevent the return of the blood from the head; or, again, those which promote both of these, as violent exercise, strong passions of the mind, the abuse of spirituous and fermented liquors, a position of the body determining the flow of blood to the head and preventing its return, straining to expel the contents of the rectum, anything worn tight around the neck, impeding the return of blood from the head.

*Treatment.*—As this disease is one of so dangerous a nature, every thing which predisposes to it should be carefully avoided. Those who are predisposed to it should prevent the exciting cause, and their plethoric disposition be obviated by keeping the alimentary canal free by saline purges, and taking gentle exercise to promote perspiration, without increasing the action of the heart and arteries, and the reducing a full diet to a moderate one should be carefully observed; all heating and intoxicating liquors should be shunned. Where the vessels of the head are turgid, cold should be applied to them, and warmth to the extremities; or cupping glasses may be used. If the symptoms denote the approach of an attack, and the patient should be suddenly seized with an apoplectic fit, he should be bled immediately to  $\frac{1}{2}$ xxx. from the arm or temporal arteries; if he is unable to swallow, an injection should be thrown up the rectum, to evacuate the lower part of the alimentary canal, or a tube may be passed down the œsophagus, and a purgative mixture thus passed into the stomach. The only certain states of apoplexy in which we can hope for a cure, are first, where the quantity extravasated is not sufficient to suspend the functions of the brain. If a vessel is ruptured, and a large quantity of blood be effused upon the brain, the patient must die. The most favourable case is where there is no ruptured vessel, but only great turgidity. The intermediate cases are where a blood vessel is ruptured, and extravasation takes place, but insufficient to cause death if turgidity exists at the same time. Then if the turgidity be removed, the brain may adapt itself to the slight extra-

sation, and the patient may recover. The patient should be placed in as erect a position as circumstances will allow of, as if he is placed in a horizontal position it will favour the flow of blood to the head and impede its return. The head should be reclined a little backwards, and a free current of cool air around him. If he be strong and robust, and the pulse be strong, the patient should be bled from the temporal artery or jugular vein, and if the symptoms be not relieved in the course of one hour, bleed him again. Cupping glasses may be applied to the head and neck, but these should not be relied on alone. For a purgative injection, you may give ℥ss. of oil of turpentine, ℥ij. of castor oil, rubbed down with a little mucilage, and ℥viij. of infusum sennæ. Cold wet cloths should be applied to the head, and warmth to the extremities. If the purgatives cannot act upon the bowels, and the bleeding is unsuccessful, no remedies will be of any avail. If the remedies succeed, and loss of motion remain on one side of the body, we must promote the re-absorption of the extravasated blood on the brain; if the disease occur after the suppression of an hemorrhoidal discharge, the hemorrhoidal tumours should be punctured, and bleeding from the temporal artery should be practised.

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#### DR. ARNOTT'S HYDROSTATIC BED FOR INVALIDS.

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[We are happy that we are enabled to present the following extract from the forthcoming edition, the fifth, of Dr. ARNOTT'S *Elements of Physics*. Our readers will at once perceive the originality of the justly-celebrated author. It would be superfluous to eulogise a work which is an honour to our country, and which is highly appreciated throughout the civilized world.—EDS.]

##### *The Hydrostatic Bed for Invalids.*

In many of the diseases which afflict humanity, more than half of the suffering and danger is not really a part of the disease, but the effect or consequence of the confinement to which the patient is subjected. Thus a fracture of the bone of the arm is as serious a local injury as a fracture of one of the bones of the leg; but the former leaves the patient free to go about and amuse himself, or attend to business as he wills, and to eat and drink as usual—in fact, hardly renders him an invalid; while the latter imprisons the patient closely upon his bed, and brings upon him, first, the irksomeness of the continued position, and then the pains of the unequal pressure borne by the parts on which the body rests. These, in many cases of confinement, disturb the sleep and the appetite, and excite

fever, or such constitutional irritation as much to retard the cure of the original disease, and not unfrequently to produce new and more serious disease. That complete inaction should prove hurtful to the animal system, may by all be at once conceived; the operation of the continued local pressures will be understood from the following statements. The health, and even life, of every part of the animal body, depends on the sufficient circulation through it of fresh blood, driven in by the force of the heart. Now when a man is sitting or lying, the parts of his flesh compressed by the weight of the body, do not receive the blood so readily as at other times; and if from any cause the action of his heart has become weak, the interruption will both follow more quickly and be more complete. A peculiar uneasiness soon arises where the circulation is thus obstructed, impelling the person to change of position; and a healthy person changes as regularly, and with as little reflexion, as he winks to wipe and moisten his eye-balls. A person weakened by disease, however, while he generally feels the uneasiness sooner as explained above, and therefore becomes what is called restless, makes the changes with much fatigue; and should the sensations after a time become indistinct, as in the delirium of fever, in palsy, &c., or should the patient have become too weak to obey the sensation, the compressed parts are kept so long without their natural supply of blood that they lose their vitality, and become what are called sloughs or mortified parts. These have afterwards to be thrown off, if the patient survive, by the process of ulceration, and they leave deep holes, requiring to be filled up by new flesh during a tedious convalescence. Many a fever, after a favourable crisis, has terminated fatally from this occurrence of sloughing on the back or sacrum; and the same termination is common in lingering consumptions, palsies, spine diseases, &c., and generally in diseases which confine the patients long to bed.

It is to mitigate all, and entirely to prevent some of the evils attendant on the necessity of remaining in a reclining posture, that the hydrostatic bed is intended. It was first used under the following circumstances.

A lady after her confinement, which occurred prematurely, and when her child had been for some time dead, passed through a combination and succession of low fever, jaundice, and slight phlegmasia dolens of one leg. In her state of extreme depression of strength and of sensibility, she rested too long in one posture, and the parts of the body on which she had rested all suffered; a slough formed on the sacrum, another on the heel; and in the left hip, on which she had lain much, inflammation began, which terminated in abscess. These evils occurred while she was using preparations of bark, and other means, to invigorate the circulation, and while her ease and comfort were watched

over by the affectionate assiduity of her mother, with numerous attendants. After the occurrence, she was placed upon the bed contrived for invalids by Mr. Earle, furnished for this case with pillows of down and of air of various sizes, and out of its mattress portions were cut opposite to the sloughing parts; and Mr. Earle himself soon afforded his valuable aid. Such, however was the reduction of the powers of life, that in spite of all endeavours, the mischief advanced, and about a week later, during one night, the chief slough on the back was much enlarged, another had formed near it, and a new abscess was produced in the right hip. An air pillow had pressed where these sloughs appeared. The patient was at that time so weak that she generally fainted when her wounds were dressed; she was passing days and nights of uninterrupted suffering, and as all known means seemed insufficient to relieve her, her life was in imminent danger.

Under these circumstances, the idea of the hydrostatic bed occurred to me. Even the pressure of an air-pillow had killed her flesh, and it was evident that persons in such a condition could not be saved unless they could be supported without sensible inequality of pressure. I then reflected, that the support of water to a floating body is so uniformly diffused, that every thousandth of an inch of the inferior surface has as it were its own separate liquid pillar, and no one part bears the load of its neighbour—that a person resting in a bath is nearly thus supported—that this patient might be laid upon the surface of a bath over which a large sheet of the water-proof India-rubber cloth were previously thrown, she being rendered sufficiently buoyant by a soft mattress placed beneath her—thus would she repose on the face of the water, like a swan on its plumage, without sensible pressure anywhere, and almost as if the weight of her body were annihilated. The pressure of the atmosphere on our bodies is of fifteen pounds per square inch of its surface, but because uniformly diffused, is not felt. The pressure of a water bath of depth to cover the body, is less than half a pound per inch, and is similarly unperceived. A bed such as then planned was immediately made. A trough of convenient length and breadth and a foot deep was lined with metal, to make it water-tight; it was about half filled with water, and over it was thrown a sheet of the India-rubber cloth as large as would be a complete lining to it if empty. Of this sheet the edges, touched with varnish to prevent the water creeping round by capillary attraction, were afterwards secured in a water-tight manner all round to the upper border or top of the trough, shutting in the water as closely as if it had been in bottles, the only entrance left being through an opening at one corner, which could be perfectly closed. Upon this beautiful dry sheet a suitable mattress was laid,

and constituted a bed ready to receive its pillow and bedclothes, and not distinguishable from a common bed, but by its most surpassing softness or yielding. The bed was carried to the patient's house, and she was laid upon it; she was instantly relieved in a remarkable degree; sweet sleep came to her; she awoke refreshed; she passed the next night much better than usual; and on the following day, Mr. Earle found that all the sores had assumed a healthy appearance: the healing from that time went on rapidly, and no new sloughs were formed. When the patient was first laid upon the bed, her mother asked her where the down pillows, which she before had used, were to be placed; to which she answered, that she knew not, for that she felt no pain to direct: in fact, she needed them no more.

It may be here recalled to mind, that the human body is nearly of the specific gravity of water, or of the weight of its bulk of water, and therefore, as is known to swimmers, is just suspended or upheld in water without exertion, when the swimmer rests tranquilly on his back with his face upwards. He then displaces water equal to his own body in weight as well as in bulk, and is supported as the displaced water would have been. If his body be two and a half cubical feet in bulk (a common size), he will just displace two and a half cubic feet of water, equal in weight to his body. If, however, instead of displacing the water with his mere body, he choose to have something round or under him which is bulky with little weight, as the mattress of the bed above described,—when his weight has forced two cubical feet of that under the level of the water around, he will float with four-fifths of his body above the level, and will sink much less into his floating mattress than a person sinks in an ordinary feather-bed. It thus appears that by choosing the thickness of the mattress, and if unusual positions are required, by having different thickness in different parts, or by placing a bulk of folded blanket or of pillow over or under the mattress in certain situations, any desired position of the body may be easily obtained. If the water be about six inches deep, which in general will suffice, the person standing upon any part of the bed, or sitting with the knees raised, will cause the part of the mattress on which he rests gently to touch the bottom, because a narrow end of the body cannot displace water equal to the bulk of the whole, but then the person is standing or sitting on a soft sofa, and in standing or sitting, he naturally prefers the fixed to the floating support; on lying down, however, he as completely floats as if the Atlantic were under him.

This bed is a warm bed, owing to water being nearly an absolute non-conductor of heat from above downwards, and owing to its allowing no passage of cold air from below. From this last-mentioned fact, how-

ever, less of the perspiration, sensible and insensible, will be carried off by the air than in a common bed, and unless the patient can rise, or be lifted daily, to allow the bed to be aired like a common bed, there will be a necessity for using some such means as the following, to prevent the condensation of perspiration on the water-sheet below:—an oiled silk laid over the mattress, or a blanket to be occasionally changed, laid under it, or a set of flexible tubes of spiral wire laid under it, with their ENDS open to the atmosphere, to ensure a constant ventilation of the mattress; or similarly placed and producing the same effect, a layer of cork cut into square pieces, with spaces left between them to serve as conduits of air. This bed is in itself as dry as a bed can be, for the India-rubber cloth (of which bottles can be made) is quite impermeable to water, and the maker is now preparing cloth expressly for this purpose. Then, as Sir Humphrey Davy recommended that his safety lamp should be double, some persons may prefer a double sheet, to obviate the possibility of accident. Unlike any other bed that ever was contrived, it allows the patient, when capable of only feeble efforts, to change his position, almost like a person swimming, and so, to take a degree of exercise, affording the kind of relief which in constrained positions is obtained by occasional stretching, or which an invalid seeks by driving out in a soft-sprung carriage. It exceedingly facilitates turning for the purpose of dressing wounds, for by raising one side of the mattress or depressing the other, or merely by the patient's extending a limb to one side, he is gently rolled over, nearly as if he were simply suspended in water; and it is possible even to dress wounds, apply poultices, or place vessels under any part of the body, without moving the body at all; for there are some inches of yielding water under the body, and the elastic mattress may at any part be pushed down, leaving vacant space there, without the support being lessened for the other parts. Then, with all the advantages which other invalid beds possess, and with those which are entirely its own, it may yet be made so cheaply, that even in hospitals, where economy must prevail, it may at once be adopted for many of the bed-ridden. Mr. Earle, within a few days of seeing the first one, had others made for patients in St. Bartholomew's Hospital, and has been as much pleased with the results of them as of the first. The bed has since been introduced into St. George's Hospital by Mr. Keate, and elsewhere.—The author has now seen enough of the effects of this bed to make him feel it a duty at once to publish a notice of it. With it evidently, the fatal termination called sloughing, now so common, in fevers, and other diseases, need never occur again. And not only will it prevent that termination, but by alleviating

the distress through the earlier stages, it may prevent many cases from even reaching the degree of danger. Then it is peculiarly applicable to cases of fractured bones, and other surgical injuries; to palsies, diseases of the hip joint, and spine; and universally, where persons are obliged to pass much time in bed. And in all cases of curvature of the spine, either actually existing or threatened, it affords a means of laying a patient in any desired position, and with any degree of pressure incessantly urging any part of the spine back to its place. If used without the mattress, it becomes a warm or a cold bath, not allowing the body however to be touched by the water; and in India, it might be made a cool bed for persons sick or sound, during the heats which there prevent sleep and endanger health. There are numerous other professional adaptations and modifications of it, which will readily occur to practitioners sufficiently versed in the department of natural philosophy (hydrostatics) to which it belongs. Before reflection a person might suppose a resemblance between it and an air-bed or pillow, calling this a water-bed or pillow; but the principles of the two are perfectly distinct or opposite. An air pillow supports by the *tension of the surface* which encloses the air, and is therefore like a hammock or the tight sacking under the straw mattress of a common bed, and really is a hard pillow; but in the hydrostatic bed, there is no tense surface or web at all; the patient is floating upon the water, on which a loose sheet is lying, merely to keep the mattress dry, and every point of his body is supported by the water immediately beneath it. To recall the difference here described, and which is of great importance, the bed is better described by the appellation of *hydrostatic bed* than of *water-bed*.

The author has given no exclusive right or privilege to any person to make this bed. He has hitherto employed the carpenter nearest to him, Mr. Smith, 253, Tottenham-court Road, at the back of Bedford-square, and the manufacturers of the water-proof cloth, Mackintosh and Co. 58, Charing Cross; but any carpenter or upholsterer may learn to supply them, and he gives free permission to all.

The preceding paragraphs are intended as much to direct in the choice and use of common beds for the sick, as to announce and describe the hydrostatic bed for the cases in which it may be required. At present the medical attendant generally leaves whatever regards the bed to the judgment of friends or nurses; but evidently, he who has been led to reflect how much the course and event of a malady may depend on the patient's being supported, so that no pain shall arise from local pressure, and as little muscular weariness as possible from constrained position, will deem the bed-management worthy of his own attention, and will be able more judiciously both to choose and to use beds.



There is a bed constructed of spiral springs, which may be made so as to diffuse the support more equably than any except the hydrostatic bed; and had professional men generally been acquainted with it, it would have been more used than it is, and would have received various modifications, of which it is susceptible, for medical purposes. It has long been known, chiefly however as a mechanical curiosity, or an object of luxury, and was introduced into this country about seventy years ago by Mr. Merlin; but it has been so little known, that a few years ago an English tradesman thought he might appropriate the manufacture by taking a patent for it. It is now made by upholsterers generally, and the same principle is applied in the construction of sofas, chairs, and carriage cushions.

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THE CONTAGION OF CHOLERA  
VINDICATED;

*Addressed to our Brethren of the Board of  
Health.*

BY CONTAGIOSISSIMUS.

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INCREDULOS ODI.

IN this age of scepticism and infidelity, it would have been surprising, if some men had not denied the contagiousness of the Asiatic cholera, and thwarted our exertions to protect the British islands from its poisonous influence.

The anti-contagionists allege, that Hippocrates, Galen, Celsus, Rhazes, and all other ancient physicians, Grecian, Roman, and Arabian, never speak of epidemic diseases being disseminated by personal contagion, or of their venomous miasmata being conveyed in articles of merchandise; but this merely proves how inferior they were in observation to the great men of modern times.

Contagion, which entitles medicine to the name of science, was discovered in the sixteenth century, illustrious for the birth of Benedictus, whose sharp eyes detected the foul fiend in a feather-bed, where, having lurked five years, it issued forth, and despatched 5,900 persons to the other world! This achieved, it retired into an old rag; and there, having concocted its plans at leisure for fourteen years, it sallied forth again on new adventures. The sequel of the story of the rag is a mystery. What a pity the Diet at Frankfort does not possess this precious relic!

From this eventful period, facts accumulated quite sufficient to convince all but the incredulous. Virgin after virgin died of consumption in a certain room of an Italian

nunnery—in vain was the apartment purified. At length the hitherto neglected bell-pull was removed, and the dreadful distemper ceased! A ship, commanded by a Captain Chataud, brought the plague to Marseilles. It came from a healthy port, the crew were healthy during the voyage, and the plague had broken out several days before they arrived. This singularly imported pestilence was equally singular in its actions—it spared many hundreds who attended the sick night and day, and cut off whole orders of monks, who had shut themselves up in their convents. Add to these miraculous things the leathern jerkin of Fracastorius, which murdered 10,000.

So much for contagion in general; and now for that of cholera, which is equally destructive in its effects, and whimsical in its mode of dissemination. It never reached England before the year 1831, though vessels were for fourteen years arriving from the infected places. It preferred the land to the sea, and had a peculiar predilection for a portion of the Russian empire, and was at last imported into Britian from a city where it did not exist.

Nor did its freaks stop here; at Haddington, Musselburgh, and Tranent, our most zealous supporters were unable to trace how or whence it came. In the work of Professor Lizars on cholera (which is esteemed by those who foolishly differ from us), we see it asserted, that the source was also latent of the first case which appeared in Edinburgh. This was a happy, a thrice happy case. Many of our friends here showed their vast pre-eminence. By declaring it not cholera, though they never saw the patient, they proved to the world, that whether they see, or do not see the person affected, they know the disease equally well.

At the beginning of this year, Musselburgh was our field of fame, and the focus of this most subtle agent. There, a woman looking out at a window was seized with cholera in consequence of a little blood flowing in a current of water, though the girl who threw it in received no injury. Upon equally good authority it is related, that a blue-bottle fly, which had sipped of the stream, flew with the contagion into the quarantine houses, to the destruction of those healthy persons who had been brought in for safety, and in defiance of our controul over preliminary symptoms.

This poison seems to us to be like the monads of Leibnitz, endowed with intelligence; it selects its victims, its time, and its place—it spares the attendants on the sick, and infants sucking their dying parents; it may attack no more than one person in a populous street, or lay prostrate a whole isolated family. It will prefer one house or one side of a street, and despise the other; occasionally it will shun the filthiest places, and seize upon those where all is clean and com-

fortable; shun the cabins of the poor, and invade the palaces of the rich and powerful. It follows no law of contiguity—it will fly at once to great distances, leaving the intervening towns and villages intact; as from Newcastle to Haddington, from Edinburgh to Glasgow, from London to Paris: in its transitions it observes neither the ratio of communication, nor any other ascertained principle of propagation. Sometimes one individual is seized here, and another there, at long intervals from each other—sometimes hundreds or even thousands in the same city may be struck at once, as by the wand of a magician.

It is contended that these anomalies are not explicable, upon the hypothesis of contagion. We answer, that sports of nature, or *lusus naturee*, may be admitted in physics, as well as in physiology. Grant us this fact, which we hold to be unquestionable—grant us a *lusus naturee*, and the explanation will be easy to the meanest capacity, as is evident from the sound comprehension which we have of the subject.

That medical men have escaped, is nothing remarkable—they are contagion proof—the very matriculation ticket renders students impregnable; yes, a matriculation ticket renders a raw student fit to undertake the duties of a cholera hospital; and a diploma, before the ink is dry with which it is written, renders a silly lad fit to ascend an academic chair, or take charge of a royal infirmary; just as a royal mandate can convert a cunning knave, or a subservient reptile into a professor of anything; but this remark is not made with any reference to the recently appointed professors of pathology and of surgery. The magical property of tickets, diplomas, and mandates, was never before pointed out.

The practitioners of India, who have seen this disease in all its varieties, are almost to a man anti-contagionists; but is their opinion to be put in competition with ours—ours that emanates from the consecrated rag of Benedictus?

From these facts, any man will be convinced of the subtlety of this contagion, and will, no doubt, admire our mental acumen; for we alone could demonstrate its existence.

The Russian and French governments found quarantine laws useless, and abolished them; but what is Russia or France to us, while Britain is our footstool?

Those who deny personal contagion in epidemics, maintain that their cause is an unwholesome state of the atmosphere. Dr. Sanders, believing that this state ought to be, and could be, changed by artificial means, proposed, many months ago, the raising of chlorine gas in the open air, through our cities, towns, villages, &c. but we spurned the proposal. True it is, however, that in February last, chlorine was diffused in the air of Fisherrow for eight days successively, during which the cholera was arrested, be-

came milder, and finally disappeared; nor have we since heard of even one case there. By the same means, the cholera was in one or two days completely stopped at Portobello, and notwithstanding its vicinity to, and continual intercourse with Edinburgh, the population of that fine village seems to have been preserved by the occasional repetition of these fumigations. Be this as it may, who could expect us to unite for the purpose of extinguishing the cause of a pestilence? If this had been done, who could appreciate our talents and our worth? We should indeed have deprived the profession of an opportunity of becoming acquainted with this malady; besides, were we to adopt the advice of an anti-contagionist, and mistrust the profundity of our own judgment? Though there have been petty commotions now and then among the lower orders, yet we cannot too much commend the people in general, who patiently allow the cause of the disease to augment, and become general, who, in short, will rather confide in us, than use the most simple and summary means of delivering themselves from peril, and their native land from dismay, desolation, and mourning!

From jealousy, our antagonists will not acknowledge the blessings which we have conferred on our country. When Jordan died at Newcastle, we kindly allowed free communication between his house and the whole of England, but judiciously made all the coals ride quarantine for ten days in Sandgate Creek. We allowed free intercourse by land between this city and Fisherrow, but sent two poor fishermen, who came hence in a boat, to perform quarantine at Margaret's Hope. Do such measures as these afford the people no protection? Do such measures not facilitate our commerce?

When the cholera did not appear in a place surrounded by an infected district, the phenomenon was attributable to some inexplicable peculiarity; in like manner, it was owing to some peculiarity, that ever the disease raged in spite of our utmost efforts; but whenever it became mild, or ceased, we had a right to claim our meed of praise.

What could men do more than we have done? Some of us have obtained handsome appointments, others receive at least 1000*l.* a year. What then! is disinterested benevolence not deserving of its reward? Some of us have seldom or never visited a patient, but this was solely for the sake of our younger brethren; we wished them to acquire a knowledge of the disease from experience, of which we had no need; such being the strength of our "intellectual powers," that we had a perfect perception of it by "instinctive conviction."

To encourage fair investigation, we, in our reports, suppressed or retained whatever pleased or displeased us; truth is sometimes dangerous, and falsehood sometimes useful,

and every wise man would take so much of either as suited his purpose.

We have promulgated injunctions, regulations, and prescriptions for cholera which would do honour to the age of the renowned Attila, and some of us have published treatises of wonderful merit; take, for example, the suggestions of his Majesty's physician, which for elegance of diction, correctness of grammar, and depth of medical science, will survive all the works of this immortal author. Our enemies declare that we know nothing, either of the disposition of the people or of the disease. Let our popularity and our success answer the calumny. Where, throughout Asia, Africa, and Europe, is the number of deaths so great in proportion to the number of sick? Were not heroes exalted by the numbers of the dead? Ossian sung with pride, "numberless were the deaths of his arm before my hero fell."

As above stated, our adversaries talk of the ancients, but what were they compared with us? Are not the glories of Hippocrates and Galen thrown into dim eclipse by those of Abercrombie and Halford?

**COSTAGION** is very accommodating. In the year 1802, a ship arrived from Egypt, where the plague raged. Colonel Abercromby and Sir Sydney Smith, *with their suite and luggage, were instantly sent on shore*, but all the rest were kept at sea the full period of the most rigid quarantine! and thus Great Britain was preserved from the plague of Egypt.

Other contagions, however, are not so much contended as that of cholera, with which at present we are mainly concerned.

We are told, that in Russia persons were every where found wearing, with impunity, the flannels, the furs, in brief, all the clothes of those who had died of this disease; that at Moscow, fifty or sixty of the cadavers were carefully anatomised during several weeks; after the first or second day, no precautions were taken; in operating, some were wounded; others were covered with the blood; and hundreds visited the apartments, but not one experienced the slightest bad consequence.

The physicians who published this account of these dissections were highly culpable. We knew how to deal with Lizars, when he dared to make such statements.

It is recorded, that from certain cities in the East, part of the inhabitants fled, and the dead bodies of those who remained lay above one another in the streets, and yet the contagion did not increase in the vicinity.

The members of the medical faculty of Paris assures us, that "the cholera burst forth in a quarter of the city the most remote from the places where foreigners and merchandize arrive," &c.

Though we admit these averments, are they not all readily accounted for upon the

principles assigned by our friend "Contagiosissimus?" The poison of cholera is an intelligent *lusus naturæ*—it remains in clothes, in dead bodies, or in any other thing part, or place, as long as it pleases—comes out when it feels mischievously disposed, and alights with destructive fury at any distance that suits its fancy; nay, if we add another law of its motion, which he has not observed viz. that its power may increase in the ratio of the distance from its source, then we are armed at every point with an irrefutable answer. What attention, pray, does the report of the Parisian faculty deserve? Are they acquainted with the potency of matriculation tickets, diplomas, and royal mandates? Their absurd method of appointment by *concours*, or competition, deprives them of this invaluable knowledge. This is the reason that our medical institutions are *rising in reputation* daily, while *theirs are sinking into contempt*.

Of the dissemination of the poison by old clothes, we have the most surprising proofs every day. Was it not brought to Stirling by a broker, who bought old clothes in Glasgow, and, strange to say, it spared the broker, we believe, as well as the people in the shop. In the *London Medical and Surgical Journal*, we have a remarkable instance of the insidious malignity of a physician's cloak, and another of a redoubted Baron's fur surtout, raging furiously with hydrophobia.

Here arises a question of great interest—may not the infected clothes be distinguished more or less by their having assumed the blue colour of the stage of collapse? Let but Boards be instituted for the investigation, and I doubt not, that it will be proved by facts as cogent, and will be as firmly maintained by all our supporters, as the contagion of cholera itself.

A plan still more effectual, I would say radical, if I did not hate the word, might be adopted. *Since clothes are so pestiferous, the Boards of Health should unite, and petition Parliament to have them all burned throughout the three kingdoms, and in the meantime the inhabitants may display their graceful and manly naked figures in elegant tatos.*

The regulations and method of treatment which we published are approved by all those heads as correct as our own, that "have the capability of acting, or the susceptibility of being acted upon," notwithstanding which, we are assailed with ungrateful clamours and reports; such as, that some pronounced dead have suddenly revived in bed, coffin, or grave! That the majority perish who use our prescriptions, while many recover who throw them away! What more could we do? We borrowed red hot irons from Russia to apply to their backs, and they blame the heat of our zeal! We had the cholera-patients conducted through the streets in the midst of the noisy rabble, and the blind creatures do

not see that this prevented the spreading of the contagion!

While people decently attired had free communication, free egress and ingress every where, the poor, the helpless, pedlars, and vagrants of all sorts, were interdicted locomotion; and it is not allowed that this afforded any protection; nay, it is affirmed, that very many wretched beings were thus deprived of bread; but does the world not know that we supplied not a few with food, raiment, ay, and lodging too!

"Saints themselves will often be,  
Of gifts that cost them nothing, free."

Your's, &c.

PHILO-CONTAGIOSISSIMUS.

*Observations on the Healthy and Diseased Properties of the Blood.* By WILLIAM STEVENS, M.D. 8vo. pp. 504. London, 1832. Murray. Continued.

*Experimental Inquiries in Chemical Physiology (Part I. complete in one volume) on the Blood, with an Appendix, containing Remarks on Cholera Asphyxia.* By HORATIO PRATER. 8vo. pp. 304. London, 1832. Highley.

CIRCUMSTANCES, over which we had no controul, prevented us from continuing our notice of the first work on our list; but we now proceed to examine it. Before we enter upon the execution of our duty, we deem it justice to the author and his opponents, to give a brief and faithful statement of the differences between them. The facts then are these:—

In May, 1830, Dr. Stevens read a paper at the Royal College of Physicians in London, in which he maintained, "that fever is produced by a deranged state of the blood, and that death in bad fever is often caused by its dissolution—that the black colour of the blood is a certain proof of the entire loss, or at least, of the great diminution of the saline ingredients—that the dissolved state of the blood is the effect and not the cause of fever—and that the depraved condition of the vital fluid could be prevented by the employment of certain

saline remedies, such as muriate of soda, nitrate of potass, Rochelle salts. These substances possess the power of giving a rich arterial colour to venous blood, while all the acids give a dark colour to the colouring matter of healthy blood. In the yellow fever, African, typhus, or Bulam fever, the dissolution or diseased changes of the blood, are the cause of death; and likewise in the typhus of cold countries, according to the important experiments of Dr. Clanny, of Sunderland."

Dr. Stevens commenced his treatment in the West Indies in 1827, and succeeded in several hundred cases observed by his friend Dr. George Stedman of St. Thomas's. In August, 1828, the yellow fever prevailed in the garrison at Trinidad, among the Royals, and our author was requested by the Governor to visit the Military Hospital, then under the care of Mr. Greatrex. He advised bleedings and purgatives, then the use of the saline remedies, until the fever abated, and lastly quinine during the convalescence.

Dr. S. left the island in a few days, without ascertaining the results of the practice; and in May, 1829, he received a letter from Mr. Greatrex, from which the followiug is an extract:—"The *above system* has been applied to three hundred and forty cases or thereabouts, including both remitting and yellow fevers, admitted into the hospital, after the fever had existed variously from six to seventy-two hours, antecedently to an application to the hospital, with such success, that during the last seven months not a case had died." p. 366. But Mr. Greatrex complains that Dr. S. garbled his letter, and most assuredly he did, because in the term "the *above system*," the writer expressed that bleeding and the warm bath, as recommended by Dr. Jackson, were employed with the saline medicines; and of the latter he says, "but with what particular effect, I regret to say, I cannot determine for you, in consequence of its being mixed with the

effects of several other measures, which we are in the habit of adopting." p. 372. Here then is a palpable misrepresentation of Mr. Greatrex's statements, or that part of them comprehended in the words "the above system." It is true that he also stated the saline medicine was given after other remedies, and that remission of the fever followed; but this declaration did not warrant Dr. Stevens to tell the College of Physicians and the medical public, that the saline medicines alone produced the success. He however meets this dilemma, by observing that the fever was most fatal when treated after the Jacksonian method; that 40 in 300 of the Royals were destroyed by it, but not a patient lost after his practice was adopted.

Immediately after Dr. Stevens had read his paper at the College, he called on us, and went into his views at great length, which appeared to us incontrovertible, and of the greatest benefit to science and mankind. We hailed this discovery, and gave a full account of it in the monthly series of this Journal. Like all new doctrines, this had a host of admirers, among whom were Dr. Clanny of Sunderland, who had anticipated the author as to typhus, Dr. Stoker of Dublin, who had antecedently to both, referred the cause of fever to a depraved condition of the blood, Dr. Elliotson, and M. Andral of Paris. Such was the state of matters until December, 1831, when Dr. Johnson declared in the Westminster Medical Society, that he had received communications from Mr. Greatrex and Dr. Hackett of Trinidad, denying the accuracy of Dr. Stevens's statements, accusing him of misrepresentations, and that these documents should appear in the *Medico-Chirurgical Review* for Jan. 1832. They appeared accordingly; the substance of Mr. G.'s is given above, while Dr. Hackett charges our author "with misrepresentation and want of candour, denies that he had ever seen 'the watery thin black ink blood, spoken of so confidently by

Dr. Stevens,' though he had made thousands of dissections of the bodies of those who had died of fevers in the West Indies.'" Again, Dr. H. denies that the blood is black in the arteries during life, as he repeatedly observed it possess its scarlet colour after arteriotomy in the temple, that the saline medicines were not given within the first twenty-four or forty-eight hours, were not looked on as specifics, and concludes by stating, "culpable indeed must that practitioners be, who in the West India fever would place his reliance on such *trumpery*."—*Med. Chir. Rev.* Jan. 1832. p. 293.

To these charges Dr. Stevens replies, that the mortality at Trinidad was immense before his arrival, but that no fatal case occurred afterwards, when the same plan had been tried within the first twenty-four hours. He accuses his opponents of being "piqued for the reputation of the army," as Corporal Trim has it, and of attempting to deprive him of the merit of his discovery. His comments will be found in this work, and need not be alluded to further in this place, as our object is to prepare the reader to estimate the value of the doctor's hypothesis; for, if we had not adopted this precaution, we should leave our friends in the position in which we were placed when he first published his opinions, namely, that of being willing converts to his theory. Candour and an ardent love for science compel us to state both sides of this question, and to leave our readers to draw what conclusions they think proper. We refrain from offering an opinion on the contradictory statements of the contending parties.

To resume our narrative. We have to observe, that Dr. Stevens promised a reply to his assailants, which he has given in his work. He next proposed saline medicines in cholera, and praised them in the highest manner. Mr. Wakefield, surgeon to the Coldbath-fields prison, published a letter in *The Times*, May

5th ult. in which he stated that he had cured 97 in 100 cases of malignant cholera in that institution by the use of Dr. Stevens's saline medicines. Having felt great interest in studying the disease, we took pains to ascertain that so many cases of malignant cholera, had not occurred in the prison at that time. We shall not offer a comment upon this statement, our readers will form their own opinions.

We next had Dr. Stevens's reporting 75 cases, attested by Mr. Wakefield, from the same prison; while Sir David Barry, Dr. O'Shaughnessy, Dr. M'Cann, and others we know, solemnly declare there were only three malignant cases the following day in the hospital of the prison. Here is gross and wilful falsehood on some side, and those guilty of it, whoever they are, deserve the reprehension and scorn of an enlightened profession. Leaving this disreputable and disgraceful transaction to be settled by the parties at issue, we gladly proceed to examine Dr. Stevens's new doctrines, as set forth in his work.

The contents of the work are as follow:—"General Observations on the Blood; of Animal Heat; of Respiration; of the latent Power of Attraction; of Vitality of the Blood; of the Modus, Operandi of Agents on the Living Body; General Observations on Fever; Copy of a Paper read before the Royal College of Physicians in 1830; Observations and Correspondence relative to the Fever at Trinidad in 1828; and on Cholera."

The chief endeavour of Dr. Stevens is to prove, that the solid parts of the blood, fibrin, albumen, &c. "are held in solution by a saline fluid;" but the chemical composition of the saline fluid, is not given, nor is there any experimental proof of the accuracy of the statement. It is well known to those who are practically acquainted with animal chemistry, that the albumen in the serum is soluble in water, and that fibrin or

coagulated albumen are but very sparingly dissolved in solutions of muriate or carbonate soda.

It is also proved by experiment, that blood is saline after its coagulation; that albumen contains as much water and salts after coagulation as in a fluid state. These facts are attested by Dr. O'Shaughnessy, a gentleman of no mean authority upon the subject. He found, "that 1,000 grains of crassamentum, immersed in distilled water for four hours, and then incinerated, gave 3.37 saline matter; a second specimen, 3.37; a third, 3.07; so that the crassamentum thus treated yields as much saline matter acid does before the immersion in the distilled water."—*Lancet*, Aug. 25th ult.

Dr. Stevens asserts on the contrary, that the immersion of the crassamentum in distilled water removes the saline matter; that the clot becomes black in consequence, but resumes its red colour on being placed in a saline fluid; and that saline matter causes the red colour, and not oxygen. In further disproof of this position, we state, that our scientific and able contemporary, *The Dublin Journal of Medical and Chemical Science*, (Sept.) offers the following observation:—"A coagulum of ox blood, weighing probably four or five pounds, was allowed to drain for more than twenty-four hours on a sieve; the surface had been perfectly arterialized; when no more serum drained from it was cut in two, and thus two dark serous surfaces exposed to the air. In six hours they had become nearly as vividly arterial as the surface which had been presented to the serum during coagulation.

"This experiment we cannot reconcile with the perfect passiveness of oxygen and the activity of the salts alone." Again, if blood from a vein is received in an open vessel, it is red; but if allowed to escape into an exhausted flask, it will be black; and if the red is placed in the exhausted receiver of an air pump, bubbles arise,

and the blood becomes black, though it has not lost its saline ingredients; and on the admission of atmospheric air assumes a scarlet colour." Lastly, M. Denis (*Recherches Experimentales sur le Sang Humain*, p. 71.), and M. Thenard (*Traite de Chemie*, t. iv.) have proved that venous blood contains as much saline matter as arterial. Dr. Stevens attempts to overthrow this conclusion in a most extraordinary manner; he says, animal chemists differ very much, and we must draw our conclusions from the common sense of the argument. In other words, animal chemists have disproved by actual experiment my conclusions; but, gentle and philosophic reader, be guided by my assertions, based upon argument. To us it appears obvious that Dr. Stevens's hypothesis is erroneous and unworthy of adoption, and this is still further proved by the total failure of his saline medicines in cholera. We speak advisedly when we assure our readers that the saline plan advised by Dr. Stevens is now abandoned in the Cholera Hospitals of London, though it was to our personal knowledge reported as infallible in the malignant form of the prevailing epidemic, in which it failed; and some of these cases were not cholera at all. We do not make this accusation against Dr. Stevens, but against others, whom, if the law allowed us, we should expose to the severest censure.

Mr. Prater has published a most interesting and instructive work on Animal Chemistry. Though he assents, on many occasions, to Dr. Stevens's opinions, he concludes that oxygen is the sole reddening agent; or, at all events, the mere loss of carbonic acid. He likewise concludes, that the animal matter has perhaps had some influence in effecting the vermilion colour of the blood. The numerous experiments made by our author prove him to be a dexterous practical chemist, and his work will be one of reference, and perhaps authority. There is one great defect in this and Dr. Stevens's work, that

the conclusions drawn are from experiments made on the blood out of the body. Now we apprehend that the influence of vitality on the blood is considerable, and that years, perhaps centuries, must elapse, before we can duly appreciate this influence. Nevertheless, the labours of animal chemists are highly meritorious, but they appear to us totally unworthy of implicit confidence.

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*A Practical Medico-Historical Account of the Western Coast of Africa.* By JAS. BOYLE, M.C.S.I.

(Continued from page 59.)

WE come now to that part of the work especially devoted to fevers, and of these the first described is the *Climatorial Bilious Remittent Fever*, which our author first notices, because it is "less complex in its causes, more simple in its nature, and less disastrous in its results and consequences than are the others which prevail within that region. This fever, it appears, occurs chiefly in ships stationed off the coast, the crews of which have not been at all, or very slightly, exposed to local influence. When they have commenced local labour on the rivers, or when the wind blows over a swamp, the disease will assuredly assume a malignant type, the causes of the disease having lost their mere climatorial character.

"Sol-lunar influence is powerful in the production of fever on the western coast of Africa, and indeed in all parts between the tropics. Many instances have been known of men, whilst at work under the rays of the sun, dropping down, as if shot; and that, without any previous threatening symptom or habit of indiscretion; and also men, who, to avoid the closeness sometimes experienced in sleeping between decks, have slept on the upper deck, without the knowledge of the officer on watch, thus exposing themselves to the apparently harmless

beams of a brilliant moon, have often been known to be suddenly affected with fever. The rapidity of the latter attacks precludes the thought that they were attributable to damps or dews that might be falling in the night, and which, indeed, are also common causes of fever, but not so immediate in their consequences.

"The sea-faring character, as is well-known, is too frequently prone to an excessive indulgence in the use of ardent spirits, and will often elude the strictest watchfulness, and obtain that very pernicious cause of fever. It is astonishing however, to see how long the habit of inebriation may sometimes be practised with apparent immunity; but a subject addicted to that habit once attacked, his case generally defies all human means, and proves fatal.

"The converse of the above character is not at all exempt from fever in its most malignant type; if his observance of abstemiousness has been adopted through apprehension. However much the assertion may be at variance with the conclusion arrived at by some writers and observers, it may be confidently stated that the absolute "water-drinker" is in as dangerous a predicament when once seized with fever as is the absolute "drunkard."

"It is the person who lives as nearly when abroad as circumstances will allow, up to his general habits when at home, that is acting without fear; and of the three characters alluded to has infinitely the best chance of recovery when attacked by fever. To this position exceptions will, of course, be found to occur; but it is upon general results that general principles are to be established, and, so tried, the rule now recommended will not be found to be erroneous.

"A want of strict attention to ventilation and to cleanliness are sometimes the fore-runners, or remote causes, of fever on board of ships, and when fever is at all induced by such circumstances, it will be complicated in its character, difficult of

cure, and will not ordinarily cease its ravages in a short time."

We cannot help considering Mr. Boyle's declaration concerning the "water-drinker" as too strong, and not quite correct. He says the fever may become contagious in certain circumstances: this is a disputed point.

"*Ordinary Symptoms, Progress, and Treatment.*—This fever is *ordinarily* characterised by severe headache, pain at the pit of the stomach, retching or vomiting, with a costive state of the bowels; sometimes vomiting of green bile, great heat of skin, suffused eyes, and thirst; the tongue being generally more or less furred; usually, also, pains in all the joints, and tottering of the limbs; the pulse varies from 90 strokes in a minute to 120 or 140. On minute inquiry it will generally be found that the patient is suffering from severe pain in the back or loins; and if the face do not happen to be flushed at the time, it will have a livid hue, its features having a downcast appearance, and there being, in all probability, a dark areola around the eyes. Under these latter circumstances the pulse will be less developed, nor will the skin attain to so high a temperature. Most attacks will be preceded by a sense of chilliness, and attended with loss of appetite; and, in all, the greater part of the symptoms described will soon set in, and establish the true character of the disorder."

The author next gives the history of sixteen cases from his own experience and that of others, one of which we shall subjoin without any comment of our own, merely remarking that a military surgeon, who had had opportunities of seeing and treating this fever, considers the therapeutics decidedly wrong, and founded on false principles. He is of opinion that the state of the pulse, skin, tongue, &c. indicated disease of the mucous membrane of the bowels, and regrets that the abdomen was not examined. Mr. B., on the contrary, alleges that "it was not deemed necessary to examine the thoracic



or abdominal viscera, no symptoms of disease having existed in those organs previously to death." Our army friend criticises this paragraph very strongly, indeed more so than it requires, in our opinion. He says, that the absence of thoracic or abdominal symptoms is "impossible in any warm or tropical climate, and I would say that such an omission as this," (not examining the chest or abdomen) "shews that the author knows little of pathology, and has totally forgotten the vast importance and extent of mucous membrane."

"At sea, 10th August, 1822, James Jones, seaman, ætat 35. Had been on shore about fourteen days ago at Sierra Leone, where he slept and lived freely; soon after his return on board he complained of dysenteric symptoms, of which he was speedily cured. This morning he complains of headache, pains in his joints and lassitude, with nausea and thirst; pulse full, frequent, and hard; considerable feverish heat and nervous derangement; furred tongue, bowels, as he says, natural. V. S. ad ʒxxx. Subm. hyd. Ext. Colocynth, c., aa gr. vj. et postea mistura jalap, c. doses. At six p. m. still continues feverish, but expresses himself much better: medicine operated several times. Subm. hyd. et Pulvis antim. aa gr. ij. quaque tertia hora. To dilute with barley-water acidulated with lime-juice.

"11th. Headache less severe, pulse less frequent, yet there is still thirst and heat of skin.—Cont. Medicinæ."

"12th. Had a restless night, owing, in some measure, perhaps, to great rolling motion of the ship. Complains of headache and thirst; pulse and skin still rather feverish, bowels free, tongue furred.—Repet. Subm. hyd. et Pulvis antim. quaque secunda hora.

"13th. Complains of an increase of headache; bowels open; skin moist and not very hot; pulse about 90 and soft; thirst. Cont. Calomel cum Pulvis antimonalis; blisters to the temples. At six p. m. blisters rose

well, pulse soft and regular, skin cool and covered with perspiration: expresses himself much easier.

"14th. An unaccountably unfavourable change took place in the night; he was delirious; and this morning he is in a state of extreme stupor; the pulse is soft but languid; the skin is moderately warm over the whole surface, yet there is a vacancy in the eye and countenance, demonstrative of great danger.—The head to be completely shaved, its anterior part to be kept moist and cool by means of saturine lotions; a blister to be applied to the nape of the neck; his calomel and antimony, in the quantity previously ordered, to be repeated every hour, a warm bath as soon as possible, and a drachm of mercurial ointment to be rubbed on each thigh every hour till some appearance of salivation shall have taken place.

"15th. Had a good night; was twice purged by salts and senna, expresses himself free from headache or other pain. The pulse is soft, slow, and regular in its action; skin moist and cool; no appearance of salivation.—Continue the mercury internally and externally, as yesterday.

"16th. But little alteration in the symptoms; bowels free; great thirst. Complains of sore mouth, yet there is no salivation.—To continue the medicine.

"17th. Occasionally incoherent in the night; still, however, the pulse is tolerably full and soft, and there is a tolerably uniform perspiration—no ptyalism; no alvine evacuation for some hours. Complains of headache.—Infus. sennæ cum sulphas magnesia doses statim sumend.

"18th. Medicine operated freely; no thirst; pulse rather small but soft; skin cool.—Cont. medicinæ. At 6 p. m. perfectly rational, expresses himself easier; pulse pretty full, soft, and natural; skin moist.—His diet limited to tea or gruel, and arrow root or sago.

"19th. Was incoherent in the night, and is now very much confused; pulse small and irregular; frequent nervous

twitchings and picking at the bed-clothes. The extremities cold.—Balneo calid. statim. Decoct. cinch. lbss. Ammon. carbonat. et confect. aromat. aa. ℥ ij. M. et habeat cochlearum unam magnum quaque hora. The reapplication of blisters to the temples and bottles of hot water to the feet; omitting the pill and continuing the mercurial friction. The reaction which followed the use of these excitants was rapid and astonishing.

"20th. Expresses himself much better; circulation full and regular; skin moist and cool.—Ammonia to be withdrawn, continuing the other medical measures.

"21st. Was very delirious in the night, and is so, in a certain degree, now. Pulse irregular and small, with a dry skin and parched tongue: no alvine evacuation for some hours.—Infus. sennæ cum magnesia sulphatis doses; mustard cataplasms to the feet.

"22nd. Had a tolerable night; took some refreshment yesterday, and one large glass of sherry with his medicine: there is still considerable confusion of ideas, yet the pulse, this morning, is tolerably full and soft.—The mercury not producing any effect symptomatic of ptyalism, to be altogether discontinued. At 4 p. m. pulse sinking rapidly; nervous tremor; convulsive action in the larynx; eyes fixed and glassy; countenance shrunk and death-like; the pulse varying from 100 to 135, and sometimes 140 in a minute. Still there is general heat, and the pulse has firmness in its action; an enema was administered; but the fatal symptoms continued to increase in intensity until 9 at night, when the pupils becoming insensible to light, short breathing, and a gradual cessation of the heart's action, closed the case.

"*Post-mortem examination.*—The brain. On removing the cranium and duramater, there was not the slightest unnatural distention in the blood-vessels—every thing, thus far, on the contrary, had a perfectly healthy ap-

pearance. On withdrawing the tentorium and separating the hemispheres of the brain, it was seen, that adhesion to the extent of an inch had taken place between that membrane and the inner side of the left lobe of the cerebrum about its middle. The lateral ventricles contained a considerable quantity of water; and the third and fourth ventricles were filled with a pale, yellowish fluid. These were the only morbid appearances in the brain; it was not deemed necessary to examine the thoracic or abdominal viscera; no symptoms of disease having existed in those organs previously to death."

In the commencement of the disease, Mr. Boyle recommends venesection with a sparing hand, or local bleeding; the use of mercury, so as to produce and keep up gentle ptyalism for a few days, and when a remission has taken place, then blue pill and quinine. The patient, during convalescence, is to be somewhat restricted in food and drink. If there be great sickness of stomach, leeches or blisters are required over the region of that organ; bark in substance is injurious. When the collapse comes on, ammonia wines, &c. are required. The prophylactic measures recommended on board for the proper enforcement of naval discipline, so felicitously and scientifically advised by the venerable and distinguished Sir Gilbert Blane.

The next form of fever to be noticed is termed the *Endemic*, or the *Local Bilious Remittent*, which we are informed often vary like the climatorial fever in its appearance, that a young practitioner might be induced to conclude, that the employment of the different names was a distinction without a difference.

The great distinction between these two forms of disease is simply this—that, although the same symptoms may appear in each form, yet the same treatment will not apply, but must depend upon the peculiar, or specific nature of the cause of the fever, which should be most scrupu-

lously ascertained, and viewed as the only safe guide by which the treatment is to be regulated.

It appears that the natives of cold countries, the English, Irish, Scotch, North Americans, and especially the Dutch and Swedes, are more liable to this disease, which is more fatal to them than to Spaniards, Portuguese, Italians, and Brazilians; the French are more liable than the northerners, and less so than the southerners.

This is a remark of considerable importance and interest, and should be attended to by Government in making appointments to the various civil offices on the coast, many of which could be filled by foreigners.

The topographical description of the coast, and of Sierra Leone, which we have placed upon record, will sufficiently account for the prevalence of destructive fever, at the commencement and termination of the rains. Intemperance, anxiety of mind, or fear, over indulgence in the gratification of the animal passions, exposure to sudden transitions in the weather, and extreme changes in habits and exercise, such as from an active to a sedentary life, and *vice versa*, may be considered as exciting causes.

In treating this fever, our author gave blood-letting a very fair trial, without success, and was forced to abandon it.

Mercury is to be considered as the sheet-anchor; when ptyalism can be produced, the patient may be considered out of danger. It may be observed, that not one case of genuine Sierra Leone endemic fever recovered, unless the patient was more or less salivated, either previously to, or at the favourable change. Early salivation, on the second or third day, is unfavourable; while, if it occurs on the fourth, fifth, or sixth, it is to be regarded as an indication of approaching convalescence.

A warm-bath may be employed in the commencement of the attack, but is rarely to be repeated, on account of the debility it induces. Removal

of the patient from one house to another, is exceedingly dangerous.

Clysters are of great importance, and, when the stomach is deranged, should never be neglected: quinine is injurious, until a change in the disease occurs, or until the mercury begins to act; opium should be used with the greatest caution: vinegar and water applied to the surface of the body is generally very useful. The drink should be farinaceous. After the ninth, tenth, and eleventh days, the patient generally requires more substantial food, and may have a little wine,—afterwards bitter infusions may be given: fermented liquors are injurious. The endemic fever seldom attacks the same individual twice.

Various interesting cases, and extracts from medical reports, are given in illustration of the nature and treatment of the disease, for which we must refer to the instructive volume before us.

We have next a chapter devoted to the consideration of the *Irregular Bilious Fever*, and intermittents; the latter of which is believed to be a preservative against the invasion of the more dangerous fevers of the climate. For the description of both these fevers we must again refer to the work.

It is utterly impossible for us as weekly Journalists to give long extracts from works, as our matter must be diversified and very different from that which ought to be found in our monthly or quarterly contemporaries. We do not regret our incapacity in this respect upon the present occasion, because Mr. Boyle's work must be in the hands of all who visit Sierra Leone. It is replete with information, highly useful and important to the public and the profession, and is the only work of reference and authority on the frightfully destructive diseases of which it treats. There is but one fault in its execution, and that is with respect to style; but this is excusable in one so situated as Mr. Boyle has been—the

medical superintendant of the most unhealthy district in the world, who had no time to attend to the beauties of literary composition.

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THE

*London Medical & Surgical Journal.*

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*Saturday, Sept. 8, 1832.*

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MEDICAL LEGISLATION FOR  
IRELAND.

At the close of the last session of Parliament, a Bill was brought into the House of Lords, with an intent of carrying it clandestinely, the proposed object of which was, to place the appointments of physicians, surgeons, and apothecaries, to the county hospitals, or infirmaries and dispensaries in Ireland, in the hands of the Primate, the Lord Chancellor, the Bishop of the diocese, and the Rector in whose parish such institutions might be situated, and to erect these persons into corporations for each county, with powers to establish such charities. The mischief of this intended Act, was making it a clerical job, "for the church by law and constables established in Ireland," to the complete exclusion of the Presbyterian, the Catholic clergy, the Society of Friends, and all other religious denominations. We cannot find language to express our contempt for such illiberal legislation as this, or words to describe our regret, that the present Government, justly famed for liberality and philanthropy, would sanction a Bill, replete with injustice to the governors and subscribers of

these institutions, who, according to numerous Acts of Parliament, enjoy the right of voting at the elections of the medical officers to hospitals, &c. As the law now stands, grand juries are authorised to establish one hospital and several dispensaries, in every county in the sister kingdom; all persons subscribing a certain annual sum, are constituted governors, or subscribers, with a right of voting at medical elections. We know from much personal observation, that the funds of hospitals and dispensaries were often considerably augmented in consequence of the right of voting possessed by contributors to these establishments; and that the falling off of income would be ruinous, if the power of election was vested in the rector of the parish. Moreover, we must not forget, that the governors of, and subscribers to, hospitals and dispensaries, are nearly all of the Presbyterian persuasion, in the north of Ireland, and of the Catholic, in the south; and these voters were to be abolished, in order that Protestant parsons should obtain a lucrative job, and distribute the loaves and fishes among their family connexions and dependants. We beg to ask, dare the Government propose such a Bill as this for England, or for Scotland? We triumphantly answer, no. It is for Ireland only such an atrocious piece of legislation was intended. If that ill-fated country is to remain united to Great Britain, why not, in the name of wisdom, justice, and reason, assimilate, as speedily as possible, its laws to our own? Why propose laws which no

government could venture to propose for this country? Why compel the many to submit to the few, and thus reverse the fundamental principle of national legislation? Well has the illustrious bard of Ireland predicted the effect of laws founded on injustice, and opposed to the public good:—

“As long as millions shall kneel down  
To ask of thousands for their own,  
While thousands proudly turn away,  
And to the millions answer ‘nay,’  
So long the merry reign shall be  
Of Captain Rock, and his family.”

When we consider that all denominations of Christians are subscribers to the Irish county hospitals, dispensaries, &c., and that these are in the proportion of ten to one to those of the Established Church, and that these are to be prevented from exercising the right of managing and superintending the affairs of such institutions, for the purpose of enabling a greedy, and never satiated clergy, to increase its intolerable rapacity, we cannot but doubt the sincerity and good intentions of Government towards Ireland—of a Government forced on a late occasion, to act liberally and honestly by the brave people of this part of the kingdom; but when free from this omnipotent influence, continue to foster to those heart-burnings, that discord, and that monopoly, which have been the bane of Ireland since she became subject to this country. But better times have arrived—a reformed Parliament will speedily purify all the filthy sources through which partial and unjust enactments have been hitherto carried. In conclusion, we have to express our

best thanks to the *Dublin Comet*, that really independent and fearless advocate of the people, for its able exposure of this infamous and most illiberal attempt to destroy the hospital elective right in Ireland, and thereby to injure the prospects of a large proportion of our profession, whose claims to public favour, are their scientific attainments, and other proofs of ability, and not political or clerical influence. What a monstrous injustice it would be, if candidates for medical appointments, in certainly a thousand instances, could have no chance of success unless they belonged to a party, or a certain religious persuasion; and yet this is the proposition of our Whig Government, the avowed Patrons of the Diffusion of Useful Knowledge, the venerated and successful advocates of Civil and Religious Liberty, the framers of a new and an improved constitution for their country, by which the elective franchise is extended to all religious denominations. Yet these are renowned statesmen who were proceeding to tarnish the glory they were achieving by sanctioning the smuggling of a penal statute into Parliament against nine-tenths of the zealous cultivators of Medical Science in Ireland. We sincerely hope that the present Government will henceforth legislate for the public good, and not encourage corrupt personal speculation by their enactments. This intended Act leads us to notice an attack on the surgeons to county hospitals in Ireland, by one who is obviously ignorant of the course of

education, required by the Dublin corporation. It is, however, most easily answered. The members of the Dublin College are first examined in the Roman and Grecian classics in the same course, as required for admission into Trinity College, and are generally students in arts in the University. They are obliged to attend diligently five winter courses of six months duration each, of anatomy, surgery, dissections, and hospitals, and are either dressers or house surgeons, as their masters are invariably hospital surgeons. They attend all other lectures required in London. They attend all the medical lectures in the University for the medical degree; and finally, are examined publicly in the severest manner, on two separate days, for an hour each day, in anatomy, physiology, surgery, materia medica, practice of medicine and midwifery, and then if approved of, are admitted licentiates of the College. They thus require a complete knowledge of surgery, and in general obtain a doctor's degree in Edinburgh or Dublin. Is our Critic such as not to know that his course of education, is not far more complete than that required here, where the students seldom dissect for three months, where the hospital attendance is a farce, where a student, after paying his enormous fee, need never more see the surgeon's face until the end of the year, when he calls for his certificate, and then he goes up to the College to be examined by a set of Octogenarian old women, whose ignorance of minute anatomy and mo-

dern surgery is a passport to the diploma, for there is no examination in medicine, midwifery, or materia medica; and consequently the luckily diplomatist has the happiness to be excused for not knowing a dose of jalap from an equal portion of nux vomica; as to classical learning, he may be as innocent of any knowledge of it as Dr. McLeod himself. Yet exclaimeth the learned Theban, are not the members of the London College, as well educated as the impudent Dublin members.

If the members of the Dublin College have the exclusive right by law, to be county hospital surgeons, on the grounds that their education is more extensive and complete, than that of the other members of the London College, we can see no injustice in the matter. Whenever the course of education becomes the same, then the members of either college ought to enjoy the same privileges in every part of his Majesty's dominions.

We abhor and detest exclusive laws, but we admire just ones. We are the avowed advocates of reform in the medical profession, and of granting equal rights and privileges to physicians, surgeons, apothecaries, obstetricians, and general practitioners, (when legally qualified by any of our medical institutions), in all parts of these countries; but so long as England and Scotland have exclusive laws, we cannot perceive why Ireland is to be deprived of the same advantage. In declaring our opinions we wish to be distinctly understood as the advocates of no particular college.

We have condemned the by-laws of the Dublin College of Surgeons and Physicians, so we have those of London and Edinburgh. The truth is that all of them need a complete reform. We have neither partiality nor prejudice for any college, we have found medical science precisely the same in London, Dublin, and Edinburgh; and we are as firmly convinced, as we are of our own existence, that there are as erudite, and as experienced physicians, surgeons, apothecaries, and obstetricians, in one place as in the other, and therefore that medical practitioners, in each section of the empire, should have a similar education, and similar rights and privileges as British subjects; but at present the system of education and privileges differ, and while these are sanctioned by law, it is the duty of every enlightened practitioner to yield implicit obedience.

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PREDICAMENT OF THE CENTRAL BOARD,

*Respecting the last Flourish of its Medical Members to enlighten the Public on the Treatment of Cholera.*

WE last week gave a copy of a document, drawn up with all formality by those sages, and intended for circulation far and wide; and we took the liberty of making some comments, which must have placed the public on their guard. We would now appeal to the profession, whether the tone observed throughout the aforesaid document be not in an *ex cathedra* style? whether, from the outset, under the head of *treatment*,

the most dogmatic expressions be not employed as to giving so and so, or doing so and so? But, lo! on the very day on which our remarks appeared, out comes a bustling paragraph, through the mouth-pieces of the junta, to the effect that they (the junta) do not consider themselves responsible for the papers they forwarded to the medical press!! *Responsible* quotha?—no truly,—all the responsibility, on this and other points, lies with those who selected you for the important public station which you hold. The truth appears to be, that (to borrow a term from a contemporary) the *flappers* of the chairman, and his hydrophobic Gibraltar secretary, being off their posts, they have been caught napping on the subject of the treatment of cholera, by divers persons wide awake to the importance of the subject. What was to be done, when they discovered, on being roused, that they had contrary to the practice, for *some time past* productive of the best effects in this metropolis, (the practice of giving very large quantities of cold water,) been just recommending that it should only be given in spoonful? What was to be done when this discovery was made?—why nothing more simple,—have a paragraph handed about as soon as possible, declaring, *in a general way*, that no responsibility was assumed for what had been given out in such a studied shape. We saw, not without our risible muscles being excited, how one of the *clique*, while giving to the public the long list of regulations, ycleped “*sanitary*,”

felt a little wholesome criticism, as to our sages having omitted to recommend that a medical man should be called in to a patient labouring under an attack of cholera. This hint our paid friend may rest assured the public did not require, however necessary it might have been as a display of his impartiality; for simple indeed must be that public, who should look to any Board of Health for rules regarding treatment, to the exclusion of the visits of medical men; but in a ten-fold degree more simple where, as in the present case, it is well known that the members of the Board do not occupy themselves in studying the disease at the bed-sides of the sick. Indeed we know that even the Chairman, who signed the famous document to which we allude, has not been at all in the habit of directing the energies of his great mind to the effects of treatment; his *forte*, like that of his friend and *eleve* Sir David Barry, lies in the more profitable line of contagion and quarantine. But perhaps members of Boards of Health have no business to study disease, as the Sydenhams were wont to do; this would really seem to be the case, judging from the fate of poor Dr. Shiel, of Ballyshannon—dismissed from his services on the Board of Health there, because (simple man!) he thought it might be well to know something about the disease, respecting which he was called upon to give opinions, and therefore visited the sick poor with a remarkable degree of zeal. Such is the statement to be found in the pa-

per of the 31st ult. printed in that town. By the way, now that it is plain the cholera sometimes gets to the upper classes, in a way only to be guessed at by the initiated in the quarantine mysteries, (the "introduction" of the disease into the house of poor Lady Anne Wyndham, who never went beyond its walls for *three years* previous to the attack, can, no doubt, be explained *by them*) the aristocracy might *allow*, on condition of ample purifications and ablutions, those in charge of their valuable lives, to learn a little about cholera, in the only way in which a knowledge of any disease is to be obtained—by seeing it frequently. Of all the nations of the earth yet visited by cholera, this is the only one in which the *tip-top* (reckoning by the weight of their purses, and the class of persons they usually attend) of the profession have stood aloof; and it must be a curious fact to place on record, that although an epidemic has raged for several months in our capital, the above personages, with very few exceptions indeed, know no more about the disease, from personal observation, than they did when it only reigned at Jessore: a most gratifying prospect truly for those families who may have need one day for their services in its management.

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#### CONTAGION OF CHOLERA!

WHEN speaking last week about cholera in an asylum for insane persons, we were not without our hopes that the Esculapius of the Temple might be able to inform us under what mask



the contagion had passed the portal. We have since been relieved from a state of suspense by the statement, through a friend, of the surgeon of "Miles's" establishment at Hoxton, that, on this occasion, the enemy did not gain admission through any of the ordinary modes, not even through a door in any shape. What way then think you, gentle reader? Hear it ye men of cordons and quarantines! *by escalade* through a window! and the gentleman alluded to will be happy to shew you, we have no doubt, the precise point from which the enemy took his departure, disregarding distance, high walls, and so forth. But to be serious, the force of absurdity can, we think, no further go than in this story of the Hoxton gentleman. Make him forthwith, Sir William, a District Inspector; he will be of the greatest use in time of need—a *very David*.

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PRECAUTIONARY MEASURES  
AGAINST THE  
CONTAGION OF CHOLERA.

COMMEND US to the "finest peasantry" for effectual steps against the contagion which the Russell and Barry commission showed us, was of so subtle a nature as to attach itself to the ropes and sails of ships, &c. &c. As people were over and over informed that "*we could not take too many precautions,*" the hint has been duly acted upon in Ireland, and bridges are broken down, and canals cut into by the people, as we see by the public papers. What a hint for the

formation of a quarantine corps, under the command of the experienced officers now idling about!

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MEDICAL DEPARTMENT OF THE LONDON  
UNIVERSITY.

To the Editors of the *London Medical and Surgical Journal*.

GENTLEMEN,

PERMIT me to offer, through the medium of your liberal Journal, a few brief remarks on the medical department of the London University. That the instruction afforded at the above institution is of the highest character, is a fact well known to the profession at large, and particularly acknowledged by the pupils. But there appears to be one great defect, which ought to be rectified as soon as possible.

Many of your readers will doubtless perceive that I am alluding to the want of an hospital, and will answer that one is to be built immediately. Of this I am aware. But some length of time must necessarily elapse before this can be carried into execution.

Till then, if no alteration is made, the pupils will be compelled, while they *hear* the valuable lectures of the learned Professor of Medicine, Dr. Elliotson, to receive their *practical* information at the bed-side, under other teachers. Surely the bad effects of this plan must be obvious.

A young man, after one year's attention to preliminary subjects, according to the present regulations, enters more immediately on the study of the practice of medicine. He attends the lectures, and hears certain modes of treatment inculcated. He also frequents the hospital, and sees measures adopted totally at variance with what he has been taught to pursue by his other teachers. Thus, his ideas become confused, his ardour is damped, and he too often relinquishes the active pursuit of practical information, because he sees how innu-

merable and opposed are the various modes of treatment.

But if, on the contrary, he witnessed the rules inculcated in the lecture-room by his professors, actually pursued at the bed-side of the patient, he would then have an opportunity of judging for himself of the truth of their statements and the propriety of their precepts. But more need not be advanced.

The obvious question then is, could not some means be adopted, *pro tem.*, for enabling Dr. Elliotson to afford to his pupils that excellent clinical instruction which few are so able to communicate?

Trusting you will give insertion to these observations in an early Number of your Periodical,

I remain,

Your most obedient servant,

A. J. D.

[We insert the above as it has been forwarded to us from a remote part of the country.—EDS.]

REMOVAL OF ATMOSPHERIC PRESSURE  
FROM THE BODIES OF CHOLERA  
PATIENTS.

To the Editors of the London Medical and  
Surgical Journal.

GENTLEMEN,

HAVING been absent from Dublin, I did not see Dr. C. Orpen's letter of the 4th inst. in your Journal till Monday last. Our distinguished friend Mr. Carmichael, having at my request called upon Dr. Orpen, obtained from that gentleman satisfactory explanations and reference to the *time* he had mentioned his ideas respecting the probable results of removing atmospheric pressure (which was when cholera appeared in Dublin) but that he had never made any practical trials of the suggestion.

After this I wrote Dr. Orpen a letter, expressing the pleasure it gave me, that the probable utility of the principle had also occurred to him, and requesting him to turn his atten-

tion to aid in reducing the theory to practice. I pointed out to him my readiness to prove to his satisfaction, that I never had a hint of the matter from any person, that I had been expensively experimenting on the subject for some years past, that I could introduce him to some persons at Mr. Brophy's, from whose bodies I had repeatedly removed *two tons* of atmospheric pressure, long before the time mentioned in his letter, that I could shew him the details of the whole principle, which long previous to that period I had submitted to certain members of the government, and that I could easily set at rest the question of priority, both as to theory and practice, if he had at any time mentioned the matter to the Central Board, of which I am a member.

In answer, Dr. Orpen sent me a very candid reply, concluding as follows:—

“ If you wish, I will write to the Medical Journal, acknowledging that you have convinced me of your priority of ideas; occurring *first* to your mind without suggestion, as they did *afterwards* to mine without suggestion.”

I am, yours truly,

C. E. H. ORPEN.

This is so fair as to render further observations unnecessary.

It may interest your readers to see the following case, drawn up by Mr. M'Kenna, of the Cholera Hospital, by direction of Mr. Hart. The termination was fatal, but the influence of the *abstraction of air* was put beyond doubt, if a proper mode of accomplishing that procedure could be easily effected, and *continued for a sufficient time in the horizontal position*. An artist is now preparing a bath for that purpose, which can be seen at No. 3, Dame Court, Dublin.

I remain, Gentlemen,

Your obedient servant,

JAMES MURRAY, M.D.

Mount Joy Square, Dublin,

August 20, 1832.

[We are gratified to notice the

amicable conclusion of the controversy between Dr. Murray and Dr. Orpen. When men of science come in collision, the shock is not so great as when those of little minds, and whose views are interested, wage war. Here is an example worthy of imitation.—Eds.]

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EFFICACY OF DR. MURRAY'S EXHAUSTED AIR-BATH IN CHOLERA.

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*To the Editors of the London Medical and Surgical Journal.*

GENTLEMEN,

ALLOW me to lay before you a statement of the case in which I used Dr. Murray's bath. The patient appeared to me and to the gentlemen present, Drs. Ferrar and Alcock, admirably adapted to try the efficacy of the invention.

Patrick Molloy (23, South King-street), of robust frame, entered at half-past five this morning in collapse, with blue skin; extremities cold and shrivelled. At twelve o'clock, noon, was put into the air-bath immediately. Before removal from bed he had, along with the foregoing appearances, his respiration at 36; pulse in the subclavian and brachial arteries 104-8. There was none to be felt on the most careful examination at the wrists; much thirst; no vomiting, nor purging.

After being three minutes in the bath the respiration rose to 46, but gradually subsided, and did not rise to above 40 afterwards; the mercury was raised at this time about an inch in the tube, to which height it was kept as nearly as was possible. He complained occasionally of faintness, but improved evidently in the expression and colour of countenance.

After remaining sixteen minutes and a half in the bath, he was removed at his own desire, and conveyed carefully to bed. The heat in his body and limbs was very sensibly improved; the respiration 40. The pulse (*which had become perceptible at the wrist*) 136; the body not

moist; the limbs covered with a profuse perspiration; the improvement in colour and expression of countenance continuing. At a quarter of an hour after this he holds the benefits derived from the bath.

I am bound to add, that the alterations made in the bath were the greatest improvements, and the machine gave us no more than unavoidable trouble.

Your's, very truly,

J. W. M'KENNA.

Dublin, Aug. 20, 1832.

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EFFICACY OF STRYCHNINE IN CHOLERA.

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*To the Editors of the London Medical and Surgical Journal.*

GENTLEMEN,

ABOUT three months ago, I was acting as Surgeon to a Cholera Hospital in the vicinity of Edinburgh, where I had ample opportunities of observing the character of that disease, and of making inquiries into its pathology. After considerable reflection, I was led to believe, that an agent, that could forcibly evert the nervous system generally, would prove advantageous, such an agent being indicated, by the opinions I held on the proximate cause of the disease. With this impression I administered strychnine, aware that it had been, by its exerting virtues, very efficacious in affections both local and constitutional, depending on a diminished energy of the nervous system. The views on the pathology of cholera that led to the administration of strychnine, and a report of two cases, in which it was successfully exhibited, are contained in a small paper, which I drew up on the spot, and which I shall have much pleasure in submitting for your Journal.

I may here mention that its administration was followed in both cases, by a most favourable and astonishing alteration, and that its employment was not a random experiment, but that it was suggested by deductions

evidently just, from facts well ascertained.

I am, Gentlemen,  
Your most obedient servant,  
S. S. A, Surgeon.

Norton-street,  
September 3, 1832.

#### IMPROVED RAW SUGAR.

A most decided improvement has taken place in the manufacture of sugar from the cane juice, and some samples introduced into the market have excited the most eager anxiety from all parties interested in this branch of colonial and commercial intercourse. It is pure raw sugar, obtained direct from the sugar cane, without having undergone any subsequent process of decolourization or refining, prepared by effecting the last stages of the concentration of the cane juice in vacuum, at a temperature insufficient to produce any chemical changes in its constituent parts. By this improved and scientific process of manufacture, no molasses or uncrystallizable sugar is formed, and there is hence an increase in the quantity of sugar obtained of 25 per cent. Whilst this establishes the philosophical fact, that molasses are not an *educt* of the cane, but were merely a product of the former operation, from the intense and long continued degree of heat employed in the processes, this saving from the vast quantity of deteriorated material must be considered an object of the very first importance to the planter, in the increased quantity of his production, which is likewise obtained in a very far superior degree of quality and purity; and readily commands a price of 10*l.* to 12*l.* per cwt. additional in the market.

The sugar, thus obtained, is in perfect pure transparent granular crystals, developing the true crystalline form of the sugar, and being entirely free from the least portion of uncrystallizable sugar or colouring matter. It cannot fail to ensure a preference in the market for all purposes of

manufacture, solution, or for domestic economy, as it is a purer sweet than even the best refined, and possesses a rich mellifluous taste, not approached by that obtained by any other process, whilst it is not apt to become acescent in solution.

In addition to the great advantages to the planter, in saving from the vast quantity of deteriorated material, and that extensive state of partial decomposition, in which the raw sugar has uniformly been transmitted to our hands, the time and labour of the operation is greatly decreased, the apparatus possesses the power to make double the quantity in the same space of time as the old method; and this is ready for shipment in four days, in lieu of three weeks, as heretofore. In the manufacture of rum, all danger of deterioration in the production of empyremua is avoided, and a far purer spirit is obtained by the use of the molasses, which are separated by this process.

The new process is now in complete and successful operation in eight estates in Demerara. From the results of the first trials, the introduction of the present improved process cannot fail soon to become general; while it is considered by the best practical judges, to open sure and certain means of re-vivifying the spoiled fortunes of the planters, and to be of the most material influence in promoting the future prosperity of our West Indian Colonies.

[We are indebted to Mr. Booth, the eminent chemist, for the above information, and we can bear our testimony in corroboration of the excellence of sugar produced by the new method.—EDS.]

#### DIFFUSION OF TEMPERANCE SOCIETIES.

A TEMPERANCE society has been formed in Saxe Weimer under the protection of the Grand Duke. It is the first that has been formed in Germany. It is pleasing to observe the rapid progress of societies so beneficial to health and happiness.

## Hospital Reports.

## ST. THOMAS'S HOSPITAL.

## SYNOCHUS.

Richard Maddox, aged 46, a shoemaker, of a spare habit, and irritable disposition, was admitted, June 7, into Luke's Ward of this hospital, by Dr. Roots. His friends stated, that he was at first taken with cold shiverings, great pain in his head, succeeded by heat and delirium; for the first few weeks he had not much heat of skin, but great prostration of strength with languidness. It also appeared, from their statement, that ten days had elapsed since the fever commenced; and, for the last four days, he had been in a constant state of stupor. When brought to this hospital he was nearly senseless, but upon being spoken to he seemed conscious of what was said. He had an anxious countenance; bowels relaxed, six or seven times in the 24 hours, and his alvine dejections were of a light colour, and very watery; he suffered much from pressure over the whole abdomen; but more especially in the tract of the colon; his tongue, which he could protrude but a little distance from his mouth, was glazed, and chapped, brownish fur covering the centre and base, having a morbid redness at the tip and edges; urine scanty, but of a high colour, and after remaining some time deposits a sediment; skin hot, and rather dry; pulse quick, small, and feeble, 100 in a minute; complains of being very thirsty.

*Cataplas sinap. abdomini—Emp. lyttæ nuçæ, lotio frigida. capiti.*

R. *Mist crætæ comp. ℥j. post singulas sedes liquidas.*—Milk, arrow-root, sago, beef-tea, *oj. quotidie.*

*Hot bottles to his feet, tepid sponging.*

8.—Passed a very restless night; his bowels have not been open since he took the chalk mixture. He was delirious the greater part of the night;

in other respects he is much the same as yesterday.

*Rep. cataplasma sinap. abdomini.*

8, P.M.—His bowels have not been open, the pain about his abdomen very severe, and he is unable to pass his water.

*Injiciatur enema statim.*

Water drawn off by the catheter.

*Rep. cataplas sinap abdomini. ℥j.*

June 9.—The pain in his abdomen continues still. He complains this morning of sharp pains flying across his head. His bowels have not been open; still unable to pass his water without the aid of the catheter. Skin, tongue, and countenance much in the same state; pulse small and feeble, 80. Tepid sponging continued.

*Hirudines xij. abdomini statim.*

8, P. M.—Has been a little relieved from the leeches; the pain still severe; bowels not open.

*Emp. lyttæ amp. abdom.*

R. *Pulv. rhæi gr. x. statim si alvus non soluta fuerit hor. un. spat. injiciatur enema.*

10.—Continues to be very delirious; does not take notice of any thing; passed his water this morning without the use of the catheter; it is of a high colour and copious; after standing for some time deposits a sediment, although not so much as before; pulse small and feeble, 86; bowels open once since last report; the pain about the abdomen a little relieved from the blister.

R. *Ol. ricini ℥ss. statim—si alv. non soluta fuerit hor. du. spat. inj. enem.*

11.—His bowels became open about 2 o'clock, A. M.; since then, he has not felt so much pain about the abdomen, neither has he been so delirious; still complains of darting pains in his head. His tongue does not appear this morning so glossy as yesterday; but there is a collection of sordes about his teeth and gums; the tongue having the same appearance in other respects. He has been very sick this morning, every thing he has taken was soon vomited; skin hot

and dry, more so than it has been since his admission; pulse small, 110.

R. *Pulv. rhæi. c creta gr. xij. statim c haust efferves 4 tis. Tep'id sponging continued.* Diet—*seef tea, milk, and arrow root.*

13.—The sickness has nearly subsided; his skin is a great deal cooler; urine of a much lighter colour; pulse small, feeble, 80; tongue of a better colour and moist; delirium continues; countenance anxious; bowels open.

R. *Sulph. quiniæ gr. v. ex inf. rosæ comp. ʒiiss. Atis horis sumend. vin. rub. ʒiiss. bis die.*

*Rep. Pulv. rhæi gr. x. omni nocte.*

14.—Has passed a much better night than he has since his admission: he appears this morning more sensible; countenance improved; skin moist and comfortable; tongue clean; sordes left the gums; bowels open once; urine of a natural colour. Pergat.

16.—Continues to improve. His head however is still affected, and he appears very low in spirits. His daughter, who was with him to day, told me, that he had been in the habit of beating and ill-treating his wife, who had died about a month ago, almost broken hearted; which, she said, appeared to affect him so much, that he had not appeared like the same person since: this she suspected was principally the cause of his present illness.

*Pergat in usu medicamentorum*

*Vin. rub. ʒj. daily. Milk increased to lbj. daily.*

17.—His bowels have not been open since the day before yesterday; in other respects he appears much better; tongue clear and moist; skin comfortable; pulse small but irregular, 70; complains of pain in his epigastrium and head; his spirits continue very low, and he cannot bear to be spoken to.

R. *Pulv. rhei statim. hac noct. rep. si opus sit. quinine continued.*

20.—He does nothing but fret and grumble night and day for fear he should not get well; complains of pain in his forehead; this morning

his bowels became open from the medicine once, and have not been open since.

R. *Pulv. rhei gr. x. statim. et rep. omni nocte si opus sit.*  
*Emp. cauth. fronti.*

23.—Remains much the same.

*Pulv. rhei gr. x. v. quotidie. Quinine continued.*

*Tinct. hyosciami ʒj. xx. 6tis. h. Mutton chop daily.*

July 8.—He has continued to gradually improve since last report, suffering occasionally from pain in his head, which this morning is rather violent; he feels very weak, especially about his loins, knees, and ankles.

*Hirudines xij. temp.*

*Emp. lytta aur sing.*

July 14.—He has experienced great relief from the leeches and blisters, and feels himself much better; his mind appears more calm.

*Rep. mist. quinin. c. hyoscyam. Porter lbj. vin. rub. ʒiv. quotidie.*

18.—He improves very gradually; he has begun to fret again since yesterday, when he saw one of his children.

R. *Sp. ammon. aromat. ʒj. sodæ carb. ʒjss. c mist. camph. ʒiiss. omni nocte.*

26.—Since last report he has been able to get up, although he cannot walk, owing to extreme weakness; appears to suffer a good deal from pain in his loins and joints; tongue healthy; pulse small, 76; has shooting pains in his head at times.

*Baln. cald. hac nocte. et alt. vesper.*

*Pergat in usu medicamentorum.*

29.—Continues to feel very weak, but gradually improves.

*Sp. ammon. aromat. ʒj. ex mist. camp. 6tis. horis sumend.*

Aug. 1.—*Conf. rutæ ʒij. decoct. aven-dæ lbj. sit enema quo injiciendum.*

2.—His bowels are confined.

*Ol. Ricini ʒss. statim.*

4.—His bowels have been open from the castor oil; feels sick, and complains of pains in the epigastrium.

*Catap. sinap. epigastrio.*

*Acid hydrocyanic m. ij. 6tis. h. haust efferves. Meat daily; porter lbj. continued.*

9.—Finding himself much better, and gaining a little strength, he fancied fresh air would be beneficial to him; he therefore left the hospital, with permission to take some medicines with him.

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HOPITAL DE LA PITIE.

*Purulent Ophthalmia.—Supervention of Cholera in Intermittent Fever.*

A SHORT time since an asylum had been opened for receiving the orphans of those who had fallen victims to the ravages of the cholera in this capital. The house already contained 300 children, who, by the aid of the funds subscribed by all classes for this object, were to be supported, educated, and subsequently apprenticed to various trades, according to their capacities. During the last three weeks the measles attacked a large majority of the children in this establishment, but had nearly disappeared, when, at the commencement of the present week, and just at the period when the cholera was beginning once more to abate in this city, another epidemic, not so violent, but equally general, broke out amongst the orphans of the asylum above-mentioned. The disease is no other than a violent and purulent ophthalmia, and so indiscriminate has been its attack, that out of the 300 children in the institution, 299 have been seized with the malady, and the sufferings of those little creatures are in many instances extremely severe. As you may well imagine, the appearance of this second epidemic is attributed to a variety of causes, but the only rational one is the atmospheric influence, for during the last ten days the changes of atmosphere, the sudden transitions from heat to cold, have been so trying, that even an immense number of adults have been seized with catarrhal and pulmonary complaints, and therefore it is not to be wondered at that children should suffer in some way from the same morbid cause; besides, the purulent character of the ophthalmia

in question would account for its spreading to the whole of the inmates of the asylum. In consequence of the crowded state of the dormitory in that establishment, several of the children have been removed to some of the hospitals. I had an opportunity of seeing thirteen of them to day at the Hôpital de la Pitié; they seem to suffer extreme pain from the local inflammation, which, although violent, is unattended by the least symptoms of fever; the discharge from the tunica conjunctiva is most abundant, and similar in colour to that of gonorrhœa. The transparent cornea does not seem to share in the inflammation so apparent in the other external appendages of the eye, and this circumstance has furnished a favourable prognostic as to the march of the disease. With respect to the treatment, it is as yet purely French (with some exceptions); for the last two days the efficacy of the *medicine expectante* has been tried without producing any particular change in the symptoms; no active measures have been attempted, at least at the Hôpital de la Pitié, except in the case of one girl, aged ten years, from whom a small quantity of blood was taken by the lancet, and with marked improvement. The other treatment consists of injections of tepid distilled water, or of an infusion of marsh-mallows root; application of a mild cerate to the eyelids to prevent agglutination; mucilaginous drinks, and strict diet. A few days will suffice to prove the inefficacy or benefit of this lenient method, and when obtained I shall put you in possession of the results. Before closing this communication, it may not be amiss to inform you of the effect which has almost immediately followed the exhibition of the sulphate of quinine in cases of intermittent fever, at the Hôpital de la Pitié, since the invasion of cholera. I have seen three cases of this description; in the two first, the attack of cholera occurred on the day following the exhibition of the quinine, and in one proved fatal. The physician was so much surprised

at the immediate appearance of cholera in the second case, after the quinine had been taken, and especially as both patients had not the slightest symptoms of cholera on their admission, that he came to the resolution of not ordering it again during the continuance of that formidable disease. However, for reasons best known to himself, and probably upon mature deliberation, he again ordered the sulphate of quinine for a female patient, who came in on Monday last, labouring under intermittent fever, but on the following morning he found that she had been attacked with cholera during the night. This third case seems to have removed all doubt as to the singular effect of quinine under these circumstances, and its use has been altogether abandoned, in cases of intermittent in the wards, in which these accidents have occurred. What renders the above cases more singular is the fact, that M. Alibert has been prescribing sulphate of quinine and ipecacuanha with much success in cholera, at the Hôpital St. Louis.

Of the ophthalmia at the Hôpital de la Pitié, which has more of the character of an endemic than an epidemic disease, I cannot as yet afford you any satisfactory details. Several methods have been tried, but an efficacious one has not, up to the present moment, been resorted to; the milk and water method produced little benefit, no more than the lotions with infusion of marsh-mallows, application of cerates, and mercurial lotions. Within the last few days, M. Piorry, the physician, has been trying the effect of pressure upon the diseased organ, but this does not seem to lead to any marked improvement. This morning blisters had been ordered in some of the cases, and although the light has been carefully excluded by curtains, the little sufferers seem in as much torture as ever.

The cholera is diminishing steadily, but not rapidly; it is the opinion of some here, that its total disappearance will not take place for some time.

## NECROLOGY.

M. MEIRAUX, M. D. professor of natural history at the College, Charlemagne.

On board his Majesty's ship *Beagle*, on the 19th May last, off Batavia, Charles Musters, M. D. of Colwick Hall, Notts.

## MEDICAL APPOINTMENTS.

Dr. Charles Price, of Brighton, has been appointed by the Lord Chamberlain of his Majesty's household, physician extraordinary to the king.

M. Lecanu has been appointed professor adjoint, at the School of Pharmacy in Paris, in the place of M. Bourriol.

Professor Guillery, of Brussels, has been elected member of the Society of the Chemical, Physical, and Natural Sciences, in Paris.

M. de Blainville, member of the Academie des Sciences, Paris, the successor of the celebrated Cuvier, has been elected foreign associate of the Royal Society.

M. Achille Comte, author of the "*Tableaux Méthodiques du Règne Animal*," has been appointed by the Minister of the Interior, professor of natural history at the College, Charlemagne, in the room of Dr. Meiriaux, lately deceased.

M. Dumas has been appointed professor of chemistry at the Jardin des Plantes, in the place of M. Seroullas, deceased. MM. Robiquet, Pelletier, Bussy, and Caventon, were the other candidates.

M. Elie de Beaumont has been appointed to the chair of geology, at the College of France, in the room of M. Cuvier.

## NAVY APPOINTMENTS.

Assistant-surgeon C. J. Fox to the *Dryad*, as surgeon; assistant-surgeon H. D. R. Hening, to the *Meteor*; assistant-surgeon A. Kilroy, to the *Alban*; assistant-surgeon J. M. Valence, to the *Mutine*; Mr. D. Thompson, supernumerary assistant-surgeon to the *Victory*.

## FRENCH PROFESSORS.

MM. Broussais, Breschet, and Esquirol, are candidates for the seat vacant in the Academie des Sciences by the death of Baron Portal.

MM. Berard, Flourens, and Serres, are candidates for the professorship of anatomy at the Museum d'Histoire Naturelle, which is likewise vacant, in consequence of the death of M. Portal. The vacant professorship of anatomy at the Collège de France (lately held by the Baron,) will not be filled up.

## LITERARY INTELLIGENCE.

The late Epidemic Cholera at Danzick. In the press, and shortly will be published, by authority of, and dedicated by permission to his Majesty's most Honourable Privy Council, the Substance of the Medical Reports upon the Cholera Morbus, which pre-



vailed at Danzick between the end of May and first part of September, 1831; founded on actual Observation and accurate Inquiry, and transmitted to their Lordships. By John Hamett, M.D. &c. &c. R.N.

In presenting the Substance of his Reports to the public, the object of the writer is to record the actual progress of the disease, its real nature in as far as it has been ascertained from actual observation, the preventive means, the general principles and most essential particulars of the treatment; and above all to remove by a series of incontrovertible facts those ungrounded fears which are entertained of its being communicated either from person to person, or by the clothes and bedding or other effects of those attacked with it.

•• We recommend this forthcoming Work as one of the most graphic, and able, and honest hitherto published.—Eds.

## BOOKS.

Bulletin des Sciences Medicales. Par M. Fermon. Dec. 1831.

We regret to observe the discontinuation of this highly instructive and valuable periodical.

The Dublin Journal of Medicine and Chemical Science. No. iv., vol. 11, Sept.

This periodical promises to become the most scientific in this empire. The present number contains original essays by Cramp-ton (Surgeon-General), Drs. Graves, Stokes, Montgomery, Lendrick, Fergusson, Law, Churchill, &c. &c.

Observations on Spasmodic Cholera; its Origin, Nature, and Treatment, with Remarks on Epidemic Diseases generally. Second Edition; with Additions and Alterations. By Henry M'Cormac, M.D., &c. &c. London, 1832. Longman and Co.

This is an able and scientific essay, which shews the author to possess much experience and judgment.

Letters on the Cholera Morbus; containing ample Evidence that this Disease cannot be communicated from the Persons of those labouring under it to others by contact, through the Medium of Inanimate Substances, or through the Medium of the Atmosphere, and that all Restrictions by Cordon and Quarantine Regulations are useless or injurious to Society. By a Professional Man of Thirty Years Experience.

We recommend this pamphlet as one of the best we have seen on the question of contagion of cholera. Whoever reads it must be convinced that cholera is not contagious, and that the prior and present Boards of Health have declared the disease to be infectious contrary to the clearest evidence.

A Lecture, delivered in King's College, London, on the 14th March, 1832 (introductory to the Second Course). By Gilbert T. Burnett, F.L.S. Professor of Botany to the

College, and to the Medico-Botanical Society. London, 1832. Adlard, Batholonew-closc.

This is a well-written, classical and deeply interesting Lecture.

The members of the profession, who consider the damages awarded in the case of *Ramadge v. Ryan* excessive, have commenced a subscription to enable the defendant to apply for a new trial, or defray same.

## SUBSCRIPTIONS RECEIVED.

	£.	s.	d.
Dr. James Johnson	10	10	0
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# London Medical and Surgical Journal.

No. 33.

SATURDAY, SEPTEMBER 15, 1832.

VOL. II.

SELECTIONS  
FROM THE  
CLINICAL LECTURES,  
DELIVERED AT THE  
HOTEL-DIEU IN PARIS,

*During the Session of 1831 - 32;*

BY BARON DUPUYTREN,  
PRINCIPAL SURGEON OF THAT HOSPITAL.

*The Excision of Hemorrhoidal Tumours.*

DR. MARX, adds M. Dupuytren, inquired of me, if we should not *always, and in every case, cauterize immediately after the operation, rather than run the chance of internal hemorrhage, which presents the serious dangers we have already explained.* I agree with him, for it results from the recapitulation of a great number of hemorrhoidal extirpations, which I have performed at the hospital, as well as in the city, that this consecutive internal hemorrhage came on unexpectedly in two fifths of the cases of operations which have not been cauterized; never on the contrary has it taken place in cases where cauterization has been used. The question then to be decided is, are not the inconveniences of cauterization preferable to the dangers to which the patient is exposed from hemorrhage? Now it may be remarked to me, that no comparison can be made between them, that the inflammation and tumefaction which occur after cauterization, the irritation which extends to the rectum and urinary organs, generally yield to the simple treatment which I have before pointed out, and have never been followed by fatal effects; while on the contrary internal hemorrhage puts the patient's life into the most imminent danger. Let us suppose a case where some circumstance would not permit assistance to be given in time to the patient attacked by internal hemorrhage, he will perish, and the operator will feel the greatest regret for not

having prevented this accident by using cauterization. Finally, it may be said to me, that since this hemorrhage occurs in a great majority of cases, and that it is impossible, to know *a priori*, if the patient that is to be operated on may be one of the few who escape this accident, why not admit it as a principle that cauterization should always be used. I acknowledge that these considerations appeared to me to be just, and they will lead us without doubt to modify the treatment which we have used to this day in these cases. A treatment as certain in stopping hemorrhage, is the introduction of a pig's bladder stuffed with charpie into the anus. Though it succeeded in the first operation of this kind that I performed, says M. Dupuytren, I perceived that it was very annoying to the patient, and that it was almost always expelled involuntarily by spontaneous efforts, which were induced by its presence. The other consequences of the excision of hemorrhoidal tumours are much less dangerous and less unpleasant. There frequently appears a considerable tumefaction of the cellular and adipose tissue of the anus; the principal inconvenience attending this tumefaction is the severe irritation of the rectum, in consequence of which the patient, during four or five days after the operation, feels it quite impossible to go to stool: but the aperient and the enema being again administered, strict regimen being observed, this want will be very much moderated, and will remove a constipation of some days, which would be otherwise annoying. This tumefaction may also cause a retention of urine, but we possess most efficacious means of removing this; as for the tumefaction, it yields quickly to the application of leeches, emollient fomentations, baths, &c. The pain attendant on excision is intense, but almost instantaneous, and this annoyance, which is inseparable from the slightest operation, should not be weighed against the pain and danger caused by the disease. After the operation the patient is liable to different affections, which ought to be the special objects of the surgeon's attention, and which it is in his power to prevent.

It must be acknowledged that persons affected with disorganized hemorrhoids, are reduced to a state of profound anemia, to asthenia, brought on by the abundance and frequency of hemorrhages or sero-purulent discharges. These evacuations, to which the patient has for a long period been subject, cannot be suddenly stopped without causing a reaction in the whole system; a general state of *artificial* plethora is induced, sanguine congestions take place in the lungs, liver, and brain, and affections of these organs may follow. The patient is often seized with syncope, spasms, giddiness, and falls into a state of alarming insensibility; the arteries pulsate with such violence that one would think that there was aneurismal diathesis, if these anormal pulsations were not changing every instant their seat and form; and it is a remarkable fact, that this plethora coincides with a pale complexion, the skin generally yellow, or earthy coloured, especially the face, and with great weakness. Repeated bleeding for some time, and at short intervals, if the patient is young, vigorous, and robust; and if the discharge from the anus has been sanguine, the introduction of a seton and of a cautery, if the discharges were of a purulent nature; these two remedies combined, if the case require them, gentle laxatives frequently administered. These are the most approved remedies, and this is the most rational prophylactic treatment we can make use of to prevent a plethora, the existence of which would lead to the most serious danger. When the excision of the external tumour is performed, the cicatrix which remains, either from constriction of the sphincter, or from the tension of the teguments and of the anus, is sufficient in the greater number of cases to oppose efficiently the protrusion of the internal tumour, and we can then dispense with having recourse to the excision of the latter. Beside, the second excision, like that of the external tumour, is generally without injury, and the patient is completely cured of the disease. Excision may sometimes be followed by contraction of the anus. J. L. Petit has reported a case where the contraction was such, that the pipe of a syringe could scarcely be introduced; and this accident can be prevented by introducing into the intestines large wicks, and by renewing them until the cure is perfect. Let us now apply the directions given by M. Dupuytren, his particular practice, and that of his hospital will furnish us with a number of cases. 1st observation.—A shoemaker, about thirty years of age, came some time since for advice for hemorrhoidal tumours, which weakened him very much; his trade obliged him to sit continually bent; but he attributed his disease to a visit he made in Champagne, where he indulged in numerous excesses in the wine of that province. It was at that time in fact he first perceived that tumours had formed at the verge of the anus. They were at first

small, very slightly painful, and only protruded when the patient went to stool; they afterwards increased considerably in size. These tumours, as in many other cases, presented two stages, one which may be called inert, during which time the hemorrhoids did not discharge, or the discharge was a slight serous oozing, without any inflammatory symptoms; the other stage, designated hemorrhoidal crisis, is perceived by swelling inflammation, severe darting pains, a considerable discharge of blood, afterward of sanguineous serosity. These crises returned more frequently, their duration increased, the sufferings of the patient became more violent, and his health suffered great injury. When he came to the hospital he was weak, emaciated, and yellow; he walked quite bent, and could not straighten himself. This position resulted from a considerable protrusion of the hemorrhoids, which was at least as large as the fist of a child of seven or eight years old, and was composed of two tumours, one internal, the other external. The patient was besides affected with obstinate constipation, which is often the consequence of an irritation, which extends itself to the rectum, and of a retention of urine, a complication not less common than the preceding. M. Dupuytren recommended the administration of enemata, and the use of baths; by these means the retention of the urine was removed, but the fecal matter remained. The swelling of the hemorrhoids was much diminished, there was less redness, the patient suffered much less. There is no doubt that leeches, emollient fomentations, baths, enemata, rest, and proper drink, will not cure the actual crisis, but it is evident that such treatment will palliate it, and that accidents will reproduce this affection at an epoch more or less distant, according to the hygienic state of the patient.

We may be asked perhaps what inconvenience would result from the use of this palliative treatment at each return of the crisis? It is the treatment adopted by many physicians; it is also preferred by many patients who dread the operation. It sometimes happens that this temporary relief retards the return of the crises, and renders them more unusual; but more frequently they reappear, and the health of the patient visibly alters.

This motive, however allowable it may be, should not be put in comparison to the dreadful effects which the continuance of the disease would bring on; the tumours, external as well as internal, often become scirrhus; sometimes, the latter, on its development, recedes up the rectum, to a height which we cannot attain, and the disorganization extends itself in the inside of the intestines. If to these disagreeable consequences you add the general state of the patient, who presents a severe affection of the system, you will think with me, says M. Dupuytren, that it is necessary to practise excision in the ac-

tual crisis. But again, do not think that in giving this opinion, I mean that the extirpation of the hemorrhoids should always be practised; I have pointed out before in what circumstances they should be left to nature, and when they should be removed by cutting instruments. After these preliminary considerations, M. Dupuytren directed that the patient should be brought. He lay on the bed on his knees and elbows, his thighs separated, and with the scissors before mentioned, the professor excised the hemorrhoidal tumours; after the excision the wound was not cauterized. Cauterization, though certain in its results, has something appalling to the spectators. I have seen you shudder more than once at the sight of the red iron, and at the cloud of smoke which rises from the cauterized part; you may judge what an impression such a preparation would produce on the friends and relations of the patient, who are not, like you, accustomed to such scenes.

Meanwhile, fearing that the hemorrhage would supervene, we recommended to the surgeon of the ward to watch the patient with the greatest care, and to apply the cautery if the blood began to flow in the rectum. It was also to avoid this disastrous occurrence, that we make it a rule not to apply the dressings for some hours after the operation, because it is to be feared that the dressings would only hinder the blood from flowing out, and thus cause it to flow back into the superior intestines.

What we apprehended, continued M. Dupuytren, happened the next day, an internal hemorrhage manifested itself; the pupil of the ward was not mistaken, from the symptoms we had so plainly pointed out; he had recourse to the means that have always succeeded with us. He gave him an enema, which brought away a great quantity of blood, a second enema brought a considerable clot; he then made the patient strain, first to expel any blood that might remain, and secondly, to cause relaxation of the sphincter, and exhibit the surface of the divided arteries; then he applied to the bleeding parts two red hot iron instruments. The hemorrhage did not reappear, and from this period the patient no longer experienced colic pains, nor syncope.

The quantity of blood lost in this operation has been estimated to be three, four, and five pounds. It flows into the descending colon, also the transverse and ascending, and as far as the cæcum, but never beyond this. The patient, whose case we are describing, presented a complete assemblage of the symptoms of the disease, and the consequences of the operation. From the effects of cauterization he experienced a retention of urine, when it was necessary to use the catheter; after the evacuation of a great quantity of urine, he felt violent pain, which did not cease until the organ returned to its usual

state. But the inflammation and swelling caused by cauterization are already diminished, the patient is going on well, and in about fifteen days he will be cured.

Finally, we know that persons affected with hemorrhoids are subject to obstinate constipation; in this case it lasted for several days; excision, as it often happens, had increased it. We have already remarked, that we should not induce stool until the inflammation and swelling have decreased or even disappeared; because before that time, the fecal matter cannot be expelled without causing violent pain, augmenting the irritation, and tearing the parts. It was not until after this time that enemas and gentle aperients were administered. The sixth day after the operation, all these accidents were dissipated, he went with ease to stool, he had no pain, and wished to be discharged.

## SELECTIONS

FROM THE

### LECTURES

OF

SIR GEORGE L. TUTHILL.

(Continued from page 165.)

#### APOPLEXIA SEROSA, OR SEROUS APOPLEXY.

THIS disease agrees with the former one in there being a complete and universal privation of sensation and voluntary motion, whilst the action of the heart and arteries remains. Sanguineous apoplexy makes its attack more suddenly than serous. It generally attacks persons who are advanced in life, and who have been previously much weakened by disease. Here there is a plethoric state of the veins of the head; and the gradual drowsiness at first becomes habitual, and excessive; the operations of the mind become torpid, and the natural functions of the body are imperfect. The secretions from the blood are diminished by the morbid fullness of the veins, and anasarca generally comes on in old persons of a leuco-phlegmatic temperament. A leuco-phlegmatic temperament is one in which the blood contains a larger quantity of serum than is natural, and consequently greatly predisposes to apoplexia serosa, and who are subject to dropsical diseases; and this may, indeed, be considered as one variety of dropsical disease. Where this disease comes on gradually, the patient becomes drowsy, and the powers of the understanding seem excited with difficulty, and the faculties of memory and imagination seem suspended. At length all these symptoms increase greatly, and all voluntary motion seems lost.

The face becomes pale, and the features swell; the pulse is small, weak, and irregular; respiration is oppressed and stertorous; the extremities are cold and placid; and if the sudden loss of power be great, the other symptoms will resemble those of sanguineous apoplexy. There is generally some faltering of the voice and impediment of the speech before the attack comes on.

*Diagnosis.*—Serous apoplexy may be distinguished from paralysis, by the loss of power and voluntary motion; from epilepsy, by there being no convulsions; from apoplexia-sanguinea, by the pale countenance and disordered health; and from syncope, by the action of the heart and arteries.

*Prognosis.*—This is highly unfavourable, more so than in the other form of apoplexia-sanguinea; it is unfavourable in proportion as the symptoms are violent and well marked. After death the secreted fluid is found effused in the ventricles of the brain, and sometimes under the pia mater, and into the cellular structure of the membranes of the brain. Sometimes there is a larger quantity effused into the ventricles, and sometimes cavities are found in the hemispheres filled with fluid, around which cavities the substance of the brain is tough like membrane.

*Causes.*—The causes of serous apoplexy are divided into remote and proximate; and the proximate cause is pressure upon the brain from fluid effused between the hemispheres or the membranes, or into the substance of the brain itself.

The remote causes are divided into predisposing and exciting; and with regard to predisposition, different states of the vascular system will favour the production of this disease. Great tenuity of the blood, plethora in the veins of the head, relaxation of the exhalent vessels within the cranium; and if the disease arose from venous plethora, the quantity of blood poured from the arteries into the veins would cause the exhalents to secrete a large quantity of serum; and if the absorbents did not take it up in proportion as it was formed, it would cause effusion upon the brain. This disease may occur from tenuity of blood, where the patient is of a leuco-phlegmatic habit. An accumulation of serum may take place in each cavity of the body; and a relaxation of the exhalent arteries of the cranium, suffering a large quantity of fluid to pass through them, collecting faster than the absorbents can take it up; or, on the other hand, if there be a want of action in the absorbent vessels themselves, the result would be the same. If in this disease the absorbents do not take up the same quantity of serum that the exhalents pour out, the consequence will be, that a collection of serum will take place upon the cranium; and, under such circumstances, the exciting causes of sanguineous apoplexy will also produce this.

*Treatment.*—Your principal object in the treatment of this disease will be to remove the secreted fluid collected in the cranium. The process of absorption in the cranium is very tedious, and the patient cannot suffer under this disease for many hours without death. And here the patient is unable to swallow; and if any substance should ever enter the stomach, it may not produce the usual effects which it does when the patient is in health. If the quantity of effused serum be sufficient to suspend the functions of the brain, the patient will die. The most favourable case is, where the quantity effused is not sufficient to suspend the functions of the brain, but assisted by a plethoric state of the veins of the head. You can then remove the plethora by bleeding, and when that has been done, if the quantity of effused serum remaining be insufficient to do harm, the patient will recover. This is the only case favourable to recovery. As this disease attacks those of a debilitated habit, and occurs where a leuco-phlegmatic temperament prevails, it has been said by some that bleeding is hurtful. If bleeding does not succeed, nothing else will. The better way to proceed is as if the disease were occasioned by vascular fullness in the cranium; and by taking a moderate quantity of blood from the jugular vein, great benefit may result to the patient. Purgatives may then be administered freely. A pill of

*Hydrarg. submuriat, gr. v.*  
*Extract colocynth comp. gr. x.*

may be given; and three or four hours afterwards give a common black draught, which may be repeated every hour or two until it operates freely. If the patient is unable to swallow, a purgative injection may be given him, or a flexible tube may be passed down the œsophagus; and a purgative draught given, as in sanguineous apoplexy. If, after the bleeding, the patient is still unable to swallow, the case becomes a hopeless one. Mercury is sometimes rubbed on the absorbent; but if the patient can swallow it is better to give him calomel internally, as it may then serve the purposes both of an alterative and a purgative. If the patient be sufficiently relieved by the bleeding, diuretics are sometimes given to promote the secretion of urine.

R. *Hydrarg. submuriat, gr. ss.*  
*Pulvis digitalis, gr. 1.*  
*Pulvis scille, gr. ij. Misce fat pulvis ter in die sumendus.*

Whilst taking these powders the patient may drink a saturated solution of supertartrate of potass, with a little spiritus sumperi.

THE  
ANATOMICAL EXERCITATIONS  
OF  
WILLIAM HARVEY, M.D.

(Continued from page 45.)

CHAP. XII.

*That there is a circulation of the Blood, being confirmed from the second supposition.*

SINCE these things are so, it is also certain that another thing which I said before is likewise confirmed, that the blood continually passes through the heart. For we see that the blood flows from the arteries into the veins, not from the veins into the arteries. We likewise see that from one arm the whole mass of blood may be exhausted, and that too by opening one cuticular vein with a lancet, if the ligature be properly applied. We see, besides, that it is so impetuously and abundantly effused, that not only that which was comprehended in the arm, beneath the ligature, before the section, is quickly and in a little time evacuated, but likewise the blood from the whole body, as well from the arteries as from the veins.

Wherefore it is necessary, in the first place, to be confessed, that by strength and impetus it is supplied, and by force it is driven beneath the ligature (for with power and impetus it disappears therefore by the strength and pulsation of the heart); for the force and impulsion of the blood is solely from the heart.

Then it is also to be confessed that this flux proceeds from the heart, and that it flows by a passage made through the heart out of the great veins, as below the ligature the blood enters through the arteries, not through the veins; and that the arteries never receive blood from the veins, unless from the left ventricle of the heart.

Nor could there be in any other manner so much blood exhausted from one vein, so abundantly and impetuously, so easily and so suddenly, a ligature having been made alone, unless the consequences were achieved by the force and impulsion of the heart, as is stated.

And if these things be so, we may openly make a computation of the quantity, and argue concerning the motion of the blood. For if any one (the blood breaking out according to its usual effusion and impetus,) allow this to happen in phlebotomy for half an hour, there is no doubt, but that the greatest part being exhausted, syncope and lypothymia would follow, and not only the arteries, but the greatest veins would also be emptied. Therefore it stands to reason, that in the space of half an hour there passes

so much out of the great vein through the heart into the aorta.

Further, if you should estimate how many ounces flow through one arm, or how many ounces are propelled below the gentle or lower ligature in twenty or thirty pulsations, truly it would be worth thinking how much may pass through the other arm, both the legs, and through the neck, also through all the other veins and arteries of the body; In all of which, in the meanwhile, the flow which is made through the lungs and ventricles of the heart, must continually suggest the necessity of new blood, and that from the veins, and so to make a circuit about the veins; it is, therefore, necessary that there should be a circulation, since it is not possible for so great a quantity to be supplied from the food we take, and that it is far greater than is convenient for the nutrition of the parts. It is to be observed further, that in the administration of phlebotomy this assertion happens sometimes to be confirmed. For though you bind the right arm with a ligature, and lance it as it should be with a convenient orifice, and administer all things rightly, yet if fear, lypopsychia (through the passion of the mind), or any other cause supervene, so that the heart pulsates more languidly, the blood will by no means pass through, unless drop by drop, particularly if the ligature be made a little more strict or tight. The reason is, because the pulse is more languid on account of the artery being compressed, the impelling power is enfeebled, is not able to open the passage, and thrust out the blood below the ligature; yea, the enervated and languid heart is not able to draw it through the lungs, or to remove it plentifully from the veins into the arteries. In the same manner it happens by these causes that the menstruation of women, and all hemorrhages, are obstructed. You also observe this from the contrary; for fear being removed, and the spirit recollected, when they return to themselves, the *pulsific* strength being now increased, you shall behold the arteries to beat more vehemently in that heart where they are compressed and move in the wrist, and the blood to gush out further through the orifice.

CHAP. XIII.

*The third supposition is confirmed, and that there is a circulation of the blood from it.*

Hitherto we have spoken of the quantity of blood which passes through the heart and lungs in the centre of the body, and likewise from the arteries into the veins and habit of the body; it remains that we explain in what manner the blood returns from the extremities to the heart, and how the veins convey it from the extreme parts to the centre: this being done, we consider that the three fundamental propositions concerning the circula-

tion of the blood will be clear, true, stable, and sufficient to obtain confidence.

But this shall be explicit enough from the valves which are found in the concavities of these veins, their use, and from ocular proofs. The most famous Hieronymus Faber. ab Aquapendente, a most learned anatomist, and venerable old man; or as the most learned Riolanus wished it, Jac Sylvius first delineated the membranal valves in the veins being of a sigmoid figure, or semilunary, as the most projecting and thinnest parts of the inward tunics of the veins. They are situated in distant places, after a various manner, in different individuals; they are connate at the sides of the veins, looking upwards towards the roots of them, and in the middle capacity both of them (for they are mostly two) looking towards and equally and duly touching one another, so much so as often to approximate at the extremities, and to be joined, that they should prevent anything to return from the roots of the veins into the little branches, or from the greater into the lesser.

The discoverer of these valves did not understand their use, nor did others, for it is not so that the blood by its weight should pull downwards, for the valves look downwards in the jugular veins, and they prevent the blood to be carried upwards. They look backwards every where, but always towards the roots of the veins and towards the heart. I, as also others, have found the emulgent veins and branches of the mesenteric, those which looked towards the vena cava and vena porta; and likewise that there are no such valves in the arteries. And it is to be noticed, that dogs and oxen have all their valves in the division of the crural veins, at the commencement of the os sacrum, or in the iliac branches adjacent to the coccyx, in which there is nothing to be dreaded, on account of the upright stature of the human body.

Nor are there valves in the jugulars, as asserted by some, for fear of apoplexy, because the matter is apt in sleep to flow into the head through the carotid arteries. Nor, also, that the blood may stand still in divarications, and also that the mass of blood should not break into the small branches, or those which are more capacious; for they are also placed where there are no divarications, though I confess they are more frequent where divarications are to be found. Nor, finally, that the motion of the blood may be retarded from the centre of the body; for it is likely that it is sent in leisurely of its own accord out of the greater into the lesser branches, and in this manner is separated from the mass and fountain of the blood. But the valves were made for this purpose, lest the blood should move from the greater into the lesser veins, and lacerate or distend them, and, consequently, that it could not go from the centre of the body to the extremities, but rather from the extremities to the

centre. Therefore by this motion the small valves are easily closed, and prevent any foreign body from entering into them; for they are so situated and ordained, that if anything should not be sufficiently hindered in the passage by the apex of the foremost, but should escape as it were through a chink, the convexity or vault of the next might receive it, and so prevent it from passing any further.

I have often tried that in dissection, if beginning at the roots of the veins I advanced a probe towards the small branches with all the skill I could, it could not be further driven by reason of the hindrance of the valves. On the contrary, if I advanced it in, outwardly from the branches towards the root, it passed very freely. In many places two valves are so interchangeably placed and fitted, that when they are elevated in the middle of the concavity of the vein, they closely approximate, and in their extremities and concavities are united so interchangeably, that you can neither see with your eyesight, nor any way discern any crevice or conjunction. On the contrary, from introducing a probe outwards, they readily give way, and like those gates or sluices by which the course of rivers are stopped, they are easily turned back to intercept the motion of the blood from the vena cava and the heart, and being closely lifted up in many places whilst they are interchangeably shut, they do quite hinder and suppress, nor by any means permit the blood to move either upwards to the heart or downwards to the feet, nor to the sides or arms, but prevent and resist all manner of motion of the blood, which is begun in the greater veins and terminates in the lesser, yet do obey any which is begun in the small veins, and ends in the greater, and does provide a free and open way for it.

But that this truth may more clearly appear, let the arm of a man be tied with a ligature above the elbow, as for venesection, there will appear A, A, at some distance, especially in rustics and the varicosed, small nodes or tubercles B, C, D, D, E, F, not only at the divarication at E, F, but also where there is none at C, D, D; and these nodes are formed by the valves, they appearing in the exterior part of the hand and arm, if you move the blood with your finger and thumb, from the node or valve O, to H, in the second figure, you shall see that none can follow, the valves preventing it, and that the part of the vein H, O, of the second figure, drawn down between the swelling and the finger is quite obliterated, and yet full enough above the node or valve O, G, is distended; nay, if you retain the blood driven down, and the blood be removed at H, with the pressure of the finger, and press down with the other hand at the valve O, (fig. 3) being full, you cannot drive or force the blood beyond the valve O, and by so much the more you endeavour to do this, by so much the more you will see the vein distended at the valve or tu-

bercle at o, and yet that there is a vacuum at n, o.

Hence, as any one can make an experiment in many places, that the functions of the valves in the veins is similar to that of the sigmoid valves of the aorta, and pulmonary veins; that they may be closed up, lest they permit the blood to flow backwards, or retrograde. Besides, the arm being tied as before in A, A, the veins swelling, if you press below the tubercle or valve for some space L, (fig. 4.), and if afterwards you drive up the blood with your finger above the valve N, you will observe that the part of the vein between L and M, remains empty, and that the blood cannot return through the valve n, o, (fig. 2.), but the finger being removed at n, you shall see it fill again from the inferior veins, as in D, c. (fig. 1.) Hence it appears plainly, that the blood is moved from the inferior to the superior parts, and to the heart, and not on the contrary. And in some places, where there is one, or where there are many valves not sufficiently closed, the passage of the blood, from the centre to the extremities, does not seem to be impeded, though for the most part it appears so; or at least that which is carelessly performed in some places, appears to be compensated for in the following manner, either by the order, frequency, or diligence of the valves, so as the passages of the veins are open to the ingress of blood to the heart, but they are shut to the egress.

Moreover you will find, that if you bind the arm as already described, the veins being turgid, the nodes or valves appearing, if you apply your finger below any valve, firm the vein with the thumb, that no blood will flow upwards, then squeeze with your finger the blood from that portion of the vein above the valve L, N, as was before stated; then taking away your finger L, the vein will be filled from the inferior parts D, c, and again apply the finger and press the blood L, N, and n, o; repeat these experiments a thousand times in a very short period of time, then imagine how much moves upwards by compression beyond the valve, and multiplying by a thousand, you shall find so much blood passed through a small portion of the vein, that you will suppose yourself persuaded of the circulation of the blood, and of its rapid motion.

But just you should say that nature is forced by this experiment, perform it in valves far distant; and observe, your thumb being removed, how quickly the blood circulates and fills the vein from the inferior part; nor do I doubt but that you will find this to be so on investigation.

#### CHAPTER XIV.

*The conclusion of the demonstration of the circulation of the Blood.*

Now, in fine, it is right for us to bring our opinion of the circulation of the blood, and

to propound it to all men. As all these things may be confirmed by reasons and ocular experiments, that the blood passes through the lungs and heart by the pulse of the ventricles, and is impelled and emitted into the whole body, creeps into the veins and the porosities of the flesh, and through these returns as if from a circumference to the centre from the small into the large veins, thence into the vena cava, and at length comes to the auricle of the heart in such abundance, with so great flux and reflux; hence through the arteries thither, hence through the veins hither, so that it cannot be furnished by those things we take in, but in a far greater abundance than nutrition requires. When, I say, all these things are confirmed, it must be concluded, of necessity, that the blood is moved with a kind of circular motion in animals, and is in perpetual motion, that the action or function of the heart belongs to this, which it performs by pulsation; lastly, that these only are one cause of the motion and pulse of the heart.

## OBSERVATIONS

### ON THE

## BENEFICIAL EFFECTS OF EXTERNAL STIMULANTS IN INTERNAL INFLAMMATIONS.

By JOHN HANCOCK, M.D.

NATURE, it may be observed, has wisely ordered that the stomach and intestinal canal are incomparably less susceptible of being irritated by the contact of stimulants, than the external skin. I am not aware whether or not this fact has been observed by physiologists; but it seems worthy of consideration and capable of affording important deductions.—Thus capsicum so potent on the skin, is not sensibly felt in passing through the body, excepting at the mouth and fauces, and at the verge of the rectum. If indeed, the *prima via* were equally obnoxious to acrid matters as the skin, our lives would be in constant jeopardy from the ingesta taken by the mouth, especially as regards those who are fond of spices, spirits, &c. It is perhaps, the mucous membrane alone, which furnishes this defence against the irritation; and hence the dangers of continuing purgatives in dysentery. From this, it is evident, that remedies taken internally are not in general calculated to produce a very signal, or decided impression on the animal economy—not with safety at least. High stimulants taken inwardly, exert their effects more immediately on the viscera, or parts most essential to life, and therefore tend to increase internal congestion. This is pe-



culary the case with respect to the alcoholic and the diffusible stimuli.

But supposing for a moment (what however is not true), that the intestines had a susceptibility to the impression of irritants, like that of the skin, and that such impression were equally innocuous, still it should be considered how comparatively small would be the surface to be acted on, contrasted with the whole exterior surface of the body; and admitting the susceptibility or excitability to be proportionate to the surface, the amount of excitement produced on the intestines could be but trivial, compared with that of a stimulus, acting upon the whole superficies.

If then it be admitted, that an extensive and potent impression upon the whole animal economy may afford the most probable means of effecting a revulsive evolution, changing morbid determination and driving the blood from internal congested parts, it will naturally follow, I presume, that the forgoing method is that which, independent of proofs derived from experience, may hold forth the greatest chance of arresting the progress of inflammation, by driving the blood and humours from internal congested parts, equalizing the circulation, restoring a mutual balance between the powers of the heart and the external capillaries, and so ultimately obtaining the desired resolution.

The superior effects of general applications (or those acting through the medium of the whole dermoid system) over the use of inward remedies are exemplified in the decisive results of cold affusion in the high state of fevers, and in cases of over-doses of opium. When the torpor, congestion of brain, and insensibility, have occurred from an excessive dose of opium, when medicines cannot be swallowed, (and where if, they could, would be useless) it is surprising to see how the patient is roused and restored to sense and muscular motion, by dashing the naked body with cold water.

This brings to mind an interesting and instructive case which occurred in my practice four years ago, and called forth a combination of two potent remedies under consideration. It was a case of lock jaw, in a black man, named Dan, at Plantation Coffee Grove, Essiquebo. The disease was violent; and very large doses of opium and camphor were administered, till at length, during my absence, the administration of these remedies was carried to such an extent as not only to remove all tetanic symptoms, but also to produce the most deadly insensibility and apoplectic stupor. He was so far exhausted, that the cold affusion produced but a transient effect, although it roused him for a moment from the deepest lethargy. He was then rubbed over smartly with pepper, salt, and lime juice, which caused no signs of sensation. Again, however, dashing the body with cold water, it had more effect; by repeating the friction, and the cold affusion alternately, he was suc-

cessively more excited, till able to swallow an emetic, which brought up much opium and camphor. He regained his senses, had no recurrence of the spasms, and has since been tolerably healthy.

Mr. Campbell, proprietor of Sparta Estate, will he says ever remember so extraordinary a discovery, and has more than once brought it into my recollection; it bears however no comparison with another case, to which I shall refer in the course of this paper.

It is much to be lamented, that the directions we meet with in books, for counteracting the results of excessive doses of opium, refer, in general, only to the methods of removing opium from the stomach, whilst no efficient means are proposed for counteracting the deleterious effects of the poison already absorbed into the system. The stomach pump is certainly an important instrument in those cases, where the torpor and the insensibility which ensue prevent vomiting; but in such cases, unless speedily resorted to, it will seldom prove effectual, although the stomach be completely emptied, instances of which are of frequent occurrence. In a recent medical publication, containing a case related by a learned and doubtless skilful physician, in Edinburgh, a case of the sort is mentioned, in which the stomach was entirely emptied, but the patient expired from the sedative effects of the poison already absorbed. It is not stated whether any means were adopted for this purpose; but cold affusion is not mentioned, either in this case or the general directions.

I may here observe, that the same means have proved equally effectual in restoring persons in the most advanced state of inebriation from excessive drinking of spirituous liquors; and any person suffering in a morning from the effects of inordinate potations, may prove the efficacy of this remedy by causing a pailful of cold water to be dashed over his head and naked body. There can be little doubt (although the trials have not to my knowledge been made) that the same remedy might prove equally successful against the effects of all other narcotic poisons as well as opium and alcohol, as, when over doses of hemlock, digitalis, hyosciamus, &c. have been taken.

Mere friction alone has considerable powers; the irritation of a mosquito, bite for instance, or the pain of a slight bruise, will cease immediately by smartly rubbing the part. This simple fact may afford a hint of some importance in the treatment of inflammations, bites of insects, contusions and bruises of all kinds, or whatever may cause a morbid irritation in any part, as tending to produce revulsions even from internal or deep seated congestions. Lime juice is applied to these bites with advantage: its stimulus counteracts the morbid irritation, perhaps by some chemical action. Alkalies, and even comon salt, have similar effect. The

use of baths and frictions, then, is probably among the most efficient of all remedial means for restoring a due balance of the humours, promoting the circulation, and reproducing that harmonic movement in the whole of the nervous fibrilla and vascular system, which is required for a healthy state of the body.

With respect to pepper frictions, the mode of operation in giving relief may be the same perhaps as that of blistering with cantharides. It may be considered perhaps as exerting both a mechanical and chemical action, by stimulating the nerves and exhalent vessels, and attracting the blood to the surface, increasing its celerity and its stimulus on the solids, and exciting the vital functions, and doubtless also by absorption of the lymphatics, modifying in some degree the condition of the blood.

According to the common acceptation, its operations may be referred to its revulsive and equalizing effect on the circulation. The value of blisters is proved by daily experience, but (being confined to a comparatively small and circumscribed surface) their effects are too limited and transient to produce any decided impression on the whole system. Those who have duly observed the effects of blistering, need not be told, that its beneficial effects, in violent inflammations, arise not from the discharge, but from its exciting or stimulating action; and this too, slight and superficial as it is, ceases in a great measure, when the vesication is produced and the blister is removed; when the cause is removed, the effect may cease; and I would submit that the effects of blisters are not only partial but very transient, and not only so but that by concentrating the energy of the patient's mind to a particular part, they cause more sensible pain and anguish than when a stimulant is diffused over the whole body.

The object then is to draw the blood from the inward parts, to interrupt the local determination, and relieve the pressure on the suffering part, by diffusing the circulating fluids more equally throughout the whole system. This is in some measure an imitation of the natural effort, which in local inflammations induces fever, the effect of which is to generalize the circulating fluids. This natural effect, fever, is much less efficient however than when assisted by strong stimulants over the whole surface, which as it were attract the blood and heat from the inward congested parts, and at the same time rouse the nervous energy and the vital functions. Such appears to be in part the rationale of the action of general stimulants applied over the whole body, in their tending to restore that natural sympathy and reciprocal movements of the system of nerves and blood vessels, which is more compatible with a state of health.

The instances in which its success has proved so evident and remarkable have all

been in the stage of great exhaustion, when the vital powers, from the ravages of the disease, were faltering, and when it appeared very certain that no ordinary remedy could be of any avail. I have tried it indeed in but few cases excepting the most desperate; although it would undoubtedly be prudent to resort to its use at an earlier period, when, however, the advantages might not be proportionably evident.

It behoves every one to reflect how little can be expected from the exhibition of internal remedies, or any of the usual means, in cases where, from the ravages of violent and unabating internal inflammations, the patient is sinking, when blisters have proved insufficient, when bleeding can only hasten dissolution, and when internal remedies have proved quite a nullity. In such cases it still behoves the physician to leave no means untried which can offer a shadow of hope towards arresting the fatal catastrophe. If anything can, in such a direful climax, afford a glimpse of hope, I may, with the confidence founded on experience, earnestly recommend the frictions of pepper and lime juice, or vinegar with sal ammoniac, or of common salt, as the means best calculated to bring the whole system to act in one great effort against the enemy; to rub the body of the patient all over with it, and repeat the process every three, four, or six hours, more or less frequently, according to the apparent urgency of the case.

The bird pepper (*capsicum frutescens*) is the kind I have always used, it being more hot and pungent than the other kinds in general. A small handful should be well bruised in a mortar, so as to reduce the seeds and other parts to a fine powder or mass. The powder sold in the shops should not be trusted, it is shamefully sophisticated, like most other articles. Let the former be mixed with an equal quantity of table salt, and add a pint of lime juice or good vinegar. With this composition the body is to be rubbed entirely over, until it shall produce a sufficient demonstration of excitement and pain.

In a case on Plantation Anna Regina, which I propose to annex to this paper, the patient was so far advanced as to be quite insensible to the stimulus until the second day of the application, and shewed no sensibility till after at least five or six repetitions of the process.

Another instance of the value of frictions with pepper and lime juice, is that of a boy, George, belonging to Mr. Evans, one amongst several unexpected recoveries from violent inflammation, in which early bleeding had been neglected, or in which it had failed or proved insufficient, although accompanied by blisters and the usual treatment.

Several other instances occurred in my practice, giving further proofs of the efficacy of the pepper frictions in vehement inflammation of the lungs, as two at Exmouth, an

African and a Creole, who had each a violent attack of peripneumony about the same time, and in both of whom a relapse occurred, or an aggravation of symptoms from exposure to air, by opening the windows of their apartments during bad weather.

The effects of the remedy were most strikingly manifested on the Creole. My attendance was required at 9 P. M. when I found him labouring under an excessive aggravation of his disorder, with difficult respiration, cough, anxiety, hot dry skin, and small jerking pulse.\* The frictions had been used some days previously, but were discontinued, owing to the great and decided relief they had afforded. I stood by and assisted in performing the operation effectually by smart frictions over the whole body with a small handful of capsicum, bruised down with some table salt and lime juice (we used no weights or measures for this composition). He said it burnt his skin very much, but most readily submitted however, as he knew, he said, it would help him, as it had done some days before. On the following day he told me he had not slept much from the burning of the skin, but felt quite relieved of the inward pain. His skin was moist, pulse soft, expectoration free, and he experienced no difficulty in breathing. The application was afterwards repeated a few times more moderately. He had no further symptoms of complaint of the chest, except cough and expectoration, which gradually declined; but the severity of the disease had been such as to cause a serious effusion or anasarca swelling at the feet, and puffed belly, for which we directed bark, wine, and gentle exercise, and he recovered.†

Soon after this the man named Gilbert, also of Exmouth, was taken with the same complaint (a very severe peripneumony), but shortly recovered under the same regimen, which the sick nurse said caused him to perspire very freely; and indeed I always found it wonderfully to remove the constriction of the skin in cases where bleeding was inadmissible, and when all hope from this, or other means, were gone by.

The man Mars, on the same estate, recovered from pneumonia, under the same remedy, the year ensuing, and that from an almost hopeless condition. Another case of the same kind, Richard, at Hampton Court, rapidly recovered from a severe attack of peripneumony, under the use of the pepper frictions. I was absent, and the hospital

\* Tongue not dry however, as in the case of Benjamin, at Sparta.

† Mr. W. Brummell, the proprietor, was then on the estate, and doubtless would recollect these cases, such was his constant solicitude for his people, being far more like a father than a master. I am happy to say indeed, that such a character is due to very many of the planters.

attendants commenced it of their own accord, on the second or third day of the disease, as from having seen its benefits, in so many previous cases, they considered it a certain remedy. This was stated to me by Mr. M'Leman, a very careful and excellent young man, who superintended the sick house.

I must not fail to note here a previous case, in a Creole boy, called Wellington, on the same estate, in a vehement attack of pleurisy. He came into the hospital, and was bled twice the same day, and blistered on the next, with a smaller bleeding and blister repeated, and glysters, nitre, and antimony, from the first, with barley water, &c. On the third day his respiration was difficult and painful; the fever and all the symptoms were greatly aggravated; his appearance was ghastly, his tongue dry, and he swooned on sitting up in bed. This afternoon I directed frictions with bruised pepper (*capsicum frutescens*), and lime juice.\* It was faithfully executed by the sick nurse, who, following up this idea, had withal bound up his feet, legs and arms, with the same composition, as a cataplasm. I found him now, to my surprize, sitting up, and free from complaint, with composed, easy respiration, and no fever, and saying he felt no pain. The sick nurse said he appeared to derive sensible relief at about eleven o'clock the preceding night, the hour in which the fever and other symptoms had been aggravated on each preceding night.

In this case, I remarked that the sick nurse seized the idea, and commenced the process with alacrity, owing to her having witnessed its success in two former similar cases of forlorn hope, in which I had prescribed the pepper friction, and in each of which it was applied over the whole body, and often repeated. I accordingly found powdered pepper now sticking all over the boy's skin; and I was told that he complained of nothing the next day but hunger and the heat of the pepper. This early, sudden, and decisive resolution cannot be accounted for from the use of the common remedies, nor from the effort of nature.

A still more surprizing recovery was effected last year (1824,) by the same means, in the boy called Christmas, at Anna Regina. This lad (about fifteen years of age) recovered from the most hopeless state of inflammation which I ever knew, or which it is possible to conceive one to escape from. The patient was in the latter stage of measles, and the inflammation of the pulmonary organs was

\* Lime or lemon juice was more often employed, as being near at hand; but common vinegar is in all respects equal, and is free from that unpleasant clamminess on the skin, which gathers from the mucilage of the lime juice, and forming, with the salt commonly used, an adhesive substance.

in this case so excessive, that the patient could scarcely breathe, and was nearly suffocated; had constant fever, dry skin, parched tongue, and such a metastasis on the brain as rendered him delirious and perfectly insensible for about two days. Both the pulse and respiration were nearly extinct. His eye was glassy, and covered with a film; his appearance, in short, was most cadaverous; he was totally unable to swallow, and the *rancum* or rattle in the throat withal announced a speedy dissolution.

Mr. Gordon, the hospital attendant, observing that I had omitted this patient in the prescription-book, inquired if any attempt should be made to give him anything, as cold water, his mouth being dry and parched. I told him, that would only add to his distress by impeding respiration, as we had just witnessed, that nothing could possibly be of any avail; but if he pleased he could try the *rubbing* with pepper and lime-juice. Having seen its effects at Hampton Court, he commenced instantly (having two assistants employed), and diligently repeated it over the whole body. The patient was entirely insensible to its stimulus until many applications had been made, but the following day he began to shew signs of pain, and soon afterwards he spoke, and complained of the smarting *over all his skin*. From this period the fever abated, the tongue became moist, and perspiration ensued. On visiting him the next day he was sensible, and raised himself in bed, and said he must have some soup and wine, which were instantly brought him; he actually appeared like one risen from the grave. The fever and all other signs of inflammation had vanished; he complained of no pain; coughed, with a copious expectoration, which at first was dark and fœtid. The rubbing was still repeated two or three times a day, and, although reduced almost to a skeleton, his recovery was rapid and perfect. Mr. Frost, the manager, and Mr. Gordon and others, can attest the truth of this extraordinary recovery. It was, however, only by the most diligent and persevering application of the remedy, that the patient was saved.

Soon after this, George, a servant of Mr. Evans, in a desperate peripneumony, recovered under the same treatment. Bleeding and various medicines had been used without effect; both the nurse and patient scouted all other remedies, and boldly asserted that nothing but the rubbing saved him. I was called away for some days, but learned on my return that in this case, as in the others I had witnessed, the free expectoration and perspiration came on, and fever abated, together with freedom of respiration and cessation of pain, in a short time after the frictions were commenced. The patient also soon acquired a remarkable craving for food.

Another most striking case occurred on Sparta estate. The man Benjamin was at-

tacked with pleurisy, or rather peripneumony. He was bled four or five times during the first four days, with blisters and the usual remedies. On the fourth evening, finding him much worse, with dry tongue, great pain in the chest, suffocative breathing, and all the symptoms pointing to a speedy termination, the pepper frictions being resolved on, as the only hope remaining, were promptly applied and repeated several times during the night. He took nothing but barley water, with a little nitre and an opiate pill. On the morning following he was quite tranquil; the tongue was moist, heat gone, and skin soft and moist. Mr. Campbell saw him well rubbed again yesterday, (Oct. 14th.) He is now out of danger.

I have passed unnoticed many other cases of less importance, or of less severity.

In similar cases, when remedial treatment can be applied early, the lancet should be employed and the usual auxiliaries, as laxatives, antimonials, diluents, blisters, &c. We ought not to fritter the time and life of a patient under the use of single remedies, as, when a formidable enemy is within the walls, we should not put forward a force in single file, to repel his approach, and thus trifle till he gets possession of the castle. Yet, how common is it in physic to trust, as we may say, to a single piquet guard, until the breach has become irreparable.

In fine, I have found the above practice most effectual and decisive, altogether I may say, without a parallel, not having been disappointed in a single instance; and it has been to me a source of high gratification to see patients brought round under its use, from the most desperate conditions, and such as I had before considered to be past recovery.

To the preceding, I may add the following letter of an impartial and intelligent observer, Mr. Grove, who, for a short time, had charge of the hospital, and took great interest in all improvements. In answer to a note of mine, he says—

“In regard to the effects of friction with lime juice and pepper, which I have often known you to prescribe, nothing could more plainly show its great efficacy than the case of the woman Louisa at Plantation Coffee Grove. She was taken with fever, which, although not of a violent kind, soon reduced her almost to a skeleton, and rendered her completely stupid. Blisters had been applied to the back of the neck and over the head; but they failed to rouse her in the smallest degree. You then ordered the frictions to be used over the whole body, and a cataplasm of the same to be applied to the back of the neck. She did not appear to be affected by it until after several repetitions. This was the first thing that seemed to rouse her attention; her infant was frequently shown her, but she did not notice it. She gradually recovered her faculties, although very slowly; and, long after she was moving about, the same vacant stare continued as when in

the greatest state of insensibility. This wore off; it was nearly four months however, before she completely recovered her strength.

"*Essequibo, 14th, Feb. 1827.*"

The foregoing was one of those severe and advanced cases of typhoid fever most fatal in hot climates.

It may seem strange that I have confined my observations chiefly to thoracic inflammations; such however is the case, although, the same means may perhaps be equally beneficial in other inflammations of the viscera. I may however observe that, *pneumonia* is in Guiana, of much more frequent occurrence, and is more violent and destructive than any other disorder, especially amongst the black population. Yet *enteritis*, which is not unfrequent, is the most rapid of all in its progress to dissolution, and, I am inclined to think that no remedy can be more strongly indicated in this very fatal malady, than the *energetic* employment of pepper frictions; it is a measure I shall not lose sight of, whenever opportunity presents.

It was about the year 1820, when I first began to theorize on the use of such a practice, and tried it at the Hospital of Hampton Court Estate, with a success which far surpassed my expectations. The patient's name I have forgot, but the two sick nurses, Priscilla and Jane Bull (whose leg I afterwards amputated), will recollect the first as being a most forlorn case of pneumonia.

I have found similar success to attend the practice in some *prolonged* cases of the same disorder, or what is often denominated *consumption*; but a consumption arising from pneumonia has very little analogy, I conceive, with true phthisis, or tubercular consumption; the latter is *constitutional*, the other *accidental*. I have never seen it before stated, but it is a curious fact, and one deserving the serious consideration of physiologists, that, in a country where pulmonary consumption is scarcely known, *pneumonia* is the most destructive of all diseases. Whatever be their analogies or distinctions however, I should not be surprized to find the same method (with the use of Rio negro sarsa) prove more beneficial than any other practice in true tubercular consumption.

I trust that these observations may tend to draw the attention of the profession generally, towards what may perhaps be considered an entirely new application of a remedial agent, as I do not recollect, in the course of my medical reading, to have met with its similar adaptation. The success and beneficial results of the mode of treatment laid down, have however been so marked and well defined, that I can confidently recommend it as a subject worthy of general attention, and am convinced that a repetition of trials must establish its characters to a high rank amongst our medical agents or adjuvantia.

## AN ACT FOR REGULATING SCHOOLS OF ANATOMY.

[1st August, 1832.]

WHEREAS a knowledge of the causes and nature of sundry diseases which affect the body, and of the best methods of treating and curing such diseases, and of healing and repairing divers wounds and injuries to which the human frame is liable, cannot be acquired without the aid of anatomical examination: And whereas the legal supply of human bodies for such anatomical examination is insufficient fully to provide the means of such knowledge: And whereas, in order further to supply human bodies for such purposes, divers great and grievous crimes have been committed, and lately murder, for the single object of selling for such purposes the bodies of the persons so murdered: And whereas therefore it is highly expedient to give protection, under certain regulations, to the study and practice of anatomy, and to prevent, as far as may be, such great and grievous crimes and murder as aforesaid; be it therefore enacted, by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, That it shall be lawful for his Majesty's Principal Secretary of State for the time being for the Home Department in that part of the United Kingdom called Great Britain, and for the Chief Secretary for Ireland in that part of the United Kingdom called Ireland, immediately on the passing of this Act, or so soon thereafter as may be required, to grant a licence to practise anatomy to any fellow or member of any college of physicians or surgeons, or to any graduate or licentiate in medicine, or to any person lawfully qualified to practise medicine in any part of the United Kingdom, or to any professor or teacher of anatomy, medicine, or surgery, or to any student attending any school of anatomy, on application from such party for such purposes, countersigned by two of his Majesty's justices of the peace acting for the county, city, borough, or place wherein such party resides, certifying that, to their knowledge or belief, such party so applying is about to carry on the practice of anatomy.

II. And be it enacted, That it shall be lawful for his Majesty's said Principal Secretary of State, or Chief Secretary, as the case may be, immediately on the passing of this Act, or as soon thereafter as may be necessary, to appoint respectively not fewer than three persons to be inspectors of places where anatomy is carried on, and at any time after such first appointment to appoint, if they shall see fit, one or more other person or persons to be an inspector or inspectors as aforesaid; and every such inspector shall con-

tinue in office for one year, or until he be removed by the said Secretary of State or Chief Secretary, as the case may be, or until some other person shall be appointed in his place; and as often as any inspector appointed as aforesaid shall die, or shall be removed from his said office, or shall refuse or become unable to act, it shall be lawful for the said Secretary of State or Chief Secretary, as the case may be, to appoint another person to be inspector in his room.

III. And be it enacted, That it shall be lawful for the said Secretary of State or Chief Secretary, as the case may be, to direct what district of town or country, or of both, and what places where anatomy is carried on, situate within such district, every such inspector shall be appointed to superintend, and in what manner every such inspector shall transact the duties of his office.

IV. And be it enacted, That every inspector to be appointed by virtue of this Act shall make a quarterly return to the said Secretary of State or Chief Secretary, as the case may be, of every deceased person's body that during the preceding quarter has been removed for anatomical examination to every separate place in his district where anatomy is carried on, distinguishing the sex, and as far as is known at the time, the name and age of each person whose body was so removed as aforesaid.

V. And be it enacted, That it shall be lawful for every such inspector to visit and inspect, at any time, any place within his district, notice of which place has been given, as is herein-after directed, that it is intended there to practise anatomy.

VI. And be it enacted, That it shall be lawful for his Majesty to grant to every such inspector such an annual salary, not exceeding one hundred pounds, for his trouble, and to allow such a sum of money for the expenses of his office as may appear reasonable; such salaries and allowances to be charged on the Consolidated Fund of the United Kingdom, and to be payable quarterly; and that an annual return of all such salaries and allowances shall be made to Parliament.

VII. And be it enacted, That it shall be lawful for any executor or other party having lawful possession of the body of any deceased person, and not being an undertaker or other party intrusted with the body for the purpose only of interment, to permit the body of such deceased person to undergo anatomical examination, unless, to the knowledge of such executor or other party, such person shall have expressed his desire, either in writing at any time during his life, or verbally in the presence of two or more witnesses during the illness whereof he died, that his body after death might not undergo such examination, or unless the surviving husband or wife, or any known relative of the deceased person, shall require the body to be interred without such examination.

VIII. And be it enacted, That if any person, either in writing at any time during his life, or verbally in the presence of two or more witnesses during the illness whereof he died, shall direct that his body after death be examined anatomically, or shall nominate any party by this act authorized to examine bodies anatomically to make such examination, and if, before the burial of the body of such person, such direction or nomination shall be made known to the party having lawful possession of the dead body, then such last-mentioned party shall direct such examination to be made, and, in case of any such nomination as aforesaid, shall request and permit any party so authorized and nominated as aforesaid to make such examination, unless the deceased person's surviving husband or wife, or nearest known relative, or any one or more of such person's nearest known relatives, being of kin in the same degree, shall require the body to be interred without such examination.

IX. Provided always, and be it enacted, That in no case shall the body of any person be removed for anatomical examination from any place where such person may have died, until after forty-eight hours from the time of such person's decease, nor until after twenty-four hours notice, to be reckoned from the time of such decease, to the inspector of the district, of the intended removal of the body, or, if no such inspector have been appointed, to some physician, surgeon, or apothecary residing at or near the place of death, nor unless a certificate stating in what manner such person came by his death shall previously to the removal of the body have been signed by the physician, surgeon, or apothecary who attended such person during the illness whereof he died, or if no such medical man attended such person during such illness, then by some physician, surgeon, or apothecary who shall be called in after the death of such person to view his body, and who shall state the manner or cause of death according to the best of his knowledge and belief, but who shall not be concerned in examining the body after removal; and that in case of such removal, such certificate shall be delivered, together with the body, to the party receiving the same for anatomical examination.

X. And be it enacted, That it shall be lawful for any Member or Fellow of any College of Physicians or Surgeons, or any graduate or licentiate in medicine, or any person lawfully qualified to practise medicine in any part of the united kingdom, or any professor, teacher, or student of anatomy, medicine, or surgery, having a licence from his Majesty's principal secretary of state or chief secretary as aforesaid, to receive or possess for anatomical examination, or to examine anatomically, the body of any person deceased, if permitted or directed so to do by a party who had at the time of giving such permission or direction

lawful possession of the body, and who had power, in pursuance of the provisions of this Act, to permit or cause the body to be so examined, and provided such certificate as aforesaid were delivered by such party together with the body.

XI. And be it enacted, That every party so receiving a body for anatomical examination after removal shall demand and receive, together with the body, a certificate as aforesaid, and shall, within twenty-four hours next after such removal, transmit to the inspector of the district such certificate, and also a return stating at what day and hour and from whom the body was received, the date and place of death, the sex, and (as far as is known at the time) the christian and surname, age, and last place of abode of such person, or, if no such inspector have been appointed, to some physician, surgeon, or apothecary residing at or near the place to which the body is removed, and shall enter or cause to be entered the aforesaid particulars relating thereto, and a copy of the certificate he received therewith, in a book to be kept by him for that purpose, and shall produce such book whenever required so to do by any inspector so appointed as aforesaid.

XII. And be it enacted, That it shall not be lawful for any party to carry on or teach anatomy at any place, or at any place to receive or possess for anatomical examination, or examine anatomically, any deceased person's body after removal of the same, unless such party, or the owner or occupier of such place, or some party by this Act authorized to examine bodies anatomically, shall, at least one week before the first receipt or possession of a body for such purpose at such place, have given notice to the said secretary of state or chief secretary, as the case may be, of the place where it is intended to practise anatomy.

XIII. Provided always, and be it enacted, That every such body so removed as aforesaid for the purpose of examination shall, before such removal, be placed in a decent coffin or shell, and be removed therein; and that the party removing the same, or causing the same to be removed as aforesaid, shall make provision that such body, after undergoing anatomical examination, be decently interred in consecrated ground, or in some public burial ground in use for persons of that religious persuasion to which the person whose body was so removed belonged; and that a certificate of the interment of such body shall be transmitted to the Inspector of the district within six weeks after the day on which such body was received as aforesaid.

XIV. And be it enacted, That no member or fellow of any college of physicians or surgeons, nor any graduate or licentiate in medicine, nor any person lawfully qualified to practise medicine in any part of the united kingdom, nor any professor, teacher, or student of anatomy, medicine, or surgery, having

a licence from his Majesty's principal secretary of state or chief secretary as aforesaid, shall be liable to any prosecution, penalty, forfeiture, or punishment for receiving or having in his possession for anatomical examination, or for examining anatomically, any dead human body, according to the provisions of this act.

XV. And be it enacted, That nothing in this act contained shall be construed to extend to or to prohibit any post-mortem examination of any human body required or directed to be made by any competent legal authority.

XVI. And whereas an Act was passed in the ninth year of the reign of his late Majesty, for consolidating and amending the statutes in England relative to offences against the person, by which latter Act it is enacted, that the body of every person convicted of murder shall, after execution, either be dissected or hung in chains, as to the court which tried the offender shall seem meet; and that the sentence to be pronounced by the court shall express that the body of the offender shall be dissected or hung in chains, whichever of the two the court shall order; be it enacted, That so much of the said last-recited Act as authorizes the court, if it shall see fit, to direct that the body of a person convicted of murder shall, after execution, be dissected, be and the same is hereby repealed; and that in every case of conviction of any prisoner for murder the court before which such prisoner shall have been tried shall direct such prisoner either to be hung in chains, or to be buried within the precincts of the prison in which such prisoner shall have been confined after conviction, as to such court shall seem meet; and that the sentence to be pronounced by the court shall express that the body of such prisoner shall be hung in chains, or buried within the precincts of the prison, whichever of the two the court shall express that the body of such prisoner shall be hung in chains, or buried within the precincts of the prison, whichever of the two the court shall order.

XVII. And be it enacted, That if any action or suit shall be commenced or brought against any person for any thing done in pursuance of this Act, the same shall be commenced within six calendar months next after the cause of action accrued; and the defendant in every such action or suit may, at his election, plead the matter especially, or the general issue not guilty, and give this Act and the special matter in evidence at any trial to be had thereupon.

XVIII. And be it enacted, That any person offending against the provisions of this Act in England or Ireland shall be deemed and taken to be guilty of a misdemeanor, and, being duly convicted thereof, shall be punished by imprisonment for a term not exceeding three months, or by a fine not exceeding fifty pounds, at the discretion of the

court before which he shall be tried; and any person offending against the provisions of this Act in Scotland shall, upon being duly convicted of such offence, be punished by imprisonment for a term not exceeding three months, or by a fine not exceeding fifty pounds, at the discretion of the court before which he shall be tried.

XIX. And in order to remove doubts as to the meaning of certain words in this Act, be it enacted, That the words "person and party" shall be respectively deemed to include any number of persons, or any society, whether by charter or otherwise; and that the meaning of the aforesaid words shall not be restricted although the same may be subsequently referred to in the singular number and masculine gender only.

XX. And be it enacted, That this Act shall commence and take effect from and after the first day of August in the present year.

XXI. And be it enacted, That this Act may be altered or amended during the present session of Parliament.

they have undergone anatomical examination.

I have only to add that I shall be anxious to receive such advice and information as your knowledge and experience may suggest, and to assure you that any such communications, as well as the returns, shall be considered by me strictly secret and confidential, and shall only be reported to the public authorities as directed and required by the Act of Parliament.

I am, Sir,

Your obedient servant.

JAMES C. SOMERVILLE, M.D.

Office of Inspector of Anatomy,

5, Saville Row,

30th, Aug. 1832.

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DIRECTIONS  
OF THE  
*LONDON INSPECTORS of ANATOMY,*  
UNDER THE  
NEW ANATOMICAL BILL.

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SIR,

I AM desirous, on being appointed inspector pursuant to the Act for regulating the schools of anatomy, to solicit your co-operation in carrying into execution the enactments of the legislature.

In order to facilitate this object, and to secure uniformity and regularity of proceeding, I beg leave to submit to you a general form of return, as required by the statute, together with an abstract of the duties which appear to me to be imposed by it upon teachers of anatomy. It is unnecessary for me to point out how important it is, for the satisfaction of the public mind, that the natural feelings of human nature should be consulted by a strict attention to the thirteenth section of the Act, which provides for the decent interment of bodies after

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FORM OF APPLICATION.

THE party applying for a licence to practise anatomy must make a written application to the secretary of state, signed by him with his christian and surname at length, in which application he must state, he applies for a licence to practise anatomy, in pursuance of the Act passed for regulating schools of anatomy. He must state also the place of his residence, and the place where he is about to carry on the practice of anatomy, and must further state, that he is, according as the case may be, [a fellow or a member of a College of Physicians or Surgeons], or [a graduate or licentiate in medicine], or [a person lawfully qualified to practise medicine in England, Scotland, or Ireland], or [a professor or teacher of anatomy, medicine, or surgery], or [a student attending a school of anatomy].

This application is to be countersigned by two justices of the peace acting for the county, city, or borough wherein the party applying resides, and so describing themselves, certifying the place of residence of the party, and also the place where they believe him to be about to carry on the practice of anatomy.



**DUTIES OF TEACHERS OF ANATOMY,**

*According to the Act for regulating Schools of Anatomy.*

To obtain a licence according to the provisions of the Act 2d & 3d Will. IV. c. 75.

Upon receiving a body for anatomical examination, to demand and receive with the body a certificate from the physician, surgeon, or apothecary who attended the person during the illness of which he died, or from some surgeon, physician, or apothecary who shall have been called in after the death of such person to view the body, stating the manner or cause of the death, and to transmit, within twenty-four hours next after the removal of the body, such certificate to the inspector of the district; and also a return stating at what day and hour and for whom the body was received, the date and place of death, the sex, and, as far as is known at the time, the christian and surname, age, and last place of abode of such person; or if no such inspector shall have been appointed, to some physician, surgeon, or apothecary residing at or near the place to which the body is removed; and to enter or cause to be entered the aforesaid particulars, and a copy of the certificate, in a book to be kept by him for that purpose, and to produce such book whenever required by the inspector.

To give notice to the secretary of state of every place where it is intended to practise anatomy at least one week before the first receipt or possession of a dead body for such purpose at such place.

To take care that every body removed for examination shall be removed in a decent and fitting manner,

and to make provision that such body, after undergoing anatomical examination, be decently interred, according to the thirteenth clause of the said Act; and that a certificate of the interment of such body be transmitted to the inspector of the district within six weeks after the day of the reception of such body.

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**DUTIES OF THE INSPECTOR.**

He shall keep an account of all the schools of anatomy licensed by the secretary of state within the district for which he shall be appointed, with the names and residences of the teachers.

He shall make a quarterly return to the secretary of state of the body of every deceased person that during the preceding quarter has been removed for anatomical examination to every separate place in his district where anatomy is carried on; distinguishing the sex, and, as far as is known at the time, the name and age of each person whose body has been so removed as aforesaid.

He shall visit and inspect from time to time every place within his district, of which place notice has been given that it is intended there to practise anatomy; he shall take care that the provisions of the Act of Parliament are enforced, and shall report to the secretary of state any irregularities or offences against the Act which he shall observe.

He shall enter in a register kept for the purpose the returns from each school separately, and shall keep copies of all his returns and reports to the secretary of state, and shall enter all the correspondence relating to the duties of his office in a letter book:—

CONFIDENTIAL RETURN from the School of Anatomy at \_\_\_\_\_

As required by the 2nd and 3rd Will. IV. c. 75.

The Christian Name and the Surname of the Deceased.	Age and Sex.	Last Place of Abode of deceased Person.	Date and Place of Death.	Time of Removal.	Day and Hour at which the Body was received, and from whom received.	Observations.

(Signed) \_\_\_\_\_ Teacher.

OBSERVATIONS  
ON THE  
PATHOLOGY AND TREATMENT OF  
CHOLERA.

By E. L. DEVONALD, Esq.

*To the Editors of the London Medical and  
Surgical Journal.*

GENTLEMEN,

I HAVE lately had several cases of the present prevailing epidemic under my care, the result of which has been so successful that I deem myself in duty bound to publish it, for the benefit of my fellow creatures; should you think such a simple plan worthy of publicity you will greatly oblige me by giving room for it in your valuable pages. Experience, ere this, I am sure must have proved to my fellow practitioners the fatal effect of stimulating medicines. For is it not, I ask, diametrically opposite to common reasoning, as well as practice, to irritate the stomach already irritated? And also by giving stimulating medicines, would it not add an increase to the already increased secretions? And thus further aggravate the disease by detracting from the blood a greater part of

its ingredients, and render it unfit for its usual course. This being the case, what can we do? Why, soothe the system, and render unto nature any assistance she might ask for. When we are called to patients labouring under this disease, we find them crave for cold water; and let the sickness be ever so violent, they will keep the cold water longer than any thing else upon their stomach, and frequently it will abate the sickness altogether, which I have proved by experience. We find also the bowels relaxed, and diarrhoea continues, if unchecked, until it has completely drained the system. This cannot be relieved in the first instance by the mouth, owing to the irritation of the stomach, The rectum then, as well as the whole of the intestinal canal, is in an irritated condition, caused by the foreign secretion. Therefore, the same arguments with respect to the stimulating system will hold good here; but instead of water being injected up the rectum, let us try further to assist nature, by replacing if possible, part of the lost nourishment; to effect this, inject about half a pint

of beef tea, made with all spices, up the rectum, as often as the bowels are open; you will not only find part of the beef tea absorbed, but the evacuations will gradually decrease, and after several repetitions entirely stopped; the pulse you will find also gradually rise; after this desirable object is effected, I usually have recourse to calomel to restore the secretions, followed by castor oil. This plan, Gentlemen, I have adopted, which from its simplicity, and also from the success that has attended it, has induced me to send the following cases to your valuable publication. Should any of your readers think it worthy of a trial, let me strongly recommend them not to be satisfied by giving their directions once to the nurse, but repeat them, almost as often as they would have the injections given; one patient that was under my care, had as many as 160, another had 100, as you will perceive by perusing the following cases.

I am, Gentlemen,  
Your obedient servant  
E. L. DEVONALD.

Great Titchfield-street.

Case 1.—Mary Cornish, aged 9, of light complexion, living in Cavendish Mews, Devonshire-street, was attacked with a slight diarrhœa on the evening of August the 21st, which the mother thought nothing of; about 5 o'clock A. M. the diarrhœa came on with increased violence; the evacuation, according to the mother's account, had before that time been but few, the colour of which was a dark yellow, but after that what came from her was like whey. This symptom continued all day with excessive sickness and cramp about the stomach and lower extremities. The mother, who herself had been accustomed to wait upon the sick, was not much alarmed, but expected the symptoms would subside, to facilitate which she administered a little brandy and water. The disease however became more aggravated; about 8 o'clock P. M.

she sent for me, and begged my assistance as speedily as possible; Mr. Rush, a gentleman who is staying with me, obeyed immediately the summons. Upon his arrival, he found the child in a collapsed state, the eyes had sunk in their sockets, tongue cold and shrivelled, the surface of her body had become cold; sickness, and purging continued, the latter passed involuntarily in bed; hands, feet, and face blue; there was no perceptible pulse in the radial artery, that of carotids was not much more than perceptible, and the heart laboured with difficulty. He immediately ordered hot bottles to the feet, and the extremities, as well as the whole surface of the body, to be covered with hot flannels; he then left her, for the purpose of communicating to me the dangerous state she was in; upon his coming back, I immediately went to visit this unfortunate little patient. Upon my examining the child I found her exactly in the state he had described her to me; I ordered her some beef tea instantly, to be made with all spices, and to continue the use of hot flannels and bottles ordered by Mr. Rush. In the mean time of their making the beef tea, I went home to order the following mixture at the same time desiring them to give the child cold water to drink; the only thing she appeared to wish for, Potass carb.  $\zeta$ ij aquæ puræ  $\zeta$ x. three table spoonful of which, with one table spoonful of lemon juice to be given the child whenever she felt sick. The contents which came from the stomach and rectum were those denominated the rice water evacuations.

After I had sent the mixture, together with a pint pewter lavement syringe, I went back to administer the medicine myself, and to give proper directions what to do with the beef tea. I gave the first effervescing draught myself, which came up; I then repeated it, with better success. I ordered the mother to inject about half a pint of the beef tea up the rectum, after every evacuation, and

when the sickness abated, to give small quantities by the mouth; at the same time she was to continue to take cold water if she liked it. I now left her, having very little hope of her recovery. At midnight I again returned, taking Mr. Rush with me; I now found, I may say to my utmost surprize, the pulse had returned at the wrist, the sickness had somewhat abated, and the bowels had become a little more controulable. A gentle moisture was now over the surface of the body, and the tongue had become warm, and comfortable; we then left her, giving strict orders to continue the same remedies as before directed.

The next morning I again visited my little patient, found her much improved; gave strict directions to persevere in the same remedy; at 4 o'clock P. M. I visited her again; I now found her more comfortable than in the morning; the mother now informed me that the vomiting and relaxation had ceased since 10 o'clock A. M. but that she had continued to use the beef tea occasionally; and at the same time had given a little by the mouth; she also told me that the cramp had gradually decreased since about the fourth injection; at the present time the child was entirely free from it, and perfectly sensible; pulse strong and full, tongue clear and moist; had passed her water several times since two this morning; she appeared to me to be recovering as fast as possible, but still retained the peculiar sunken countenance. The only unfavourable symptom remaining, was convulsive respiration, which was performed with more difficulty than usual. I told the mother to give her as much cold water and beef tea as she might require. On my visit on the morning of the 26th, I found her much in the same state as the previous day; her bowels however had been open once, and the dejection was tinged with bile; I now ordered hydrarg. submuriat. gr. iij, every six hours, to be followed by a dose of castor oil. From this time the child gradually began to improve,

and in the course of a few days regained her former strength. *The number of injections were 160.*

Case 2.—Mrs. Cornish, the mother of the above child, aged 46, a healthy looking woman, was seized on 27th August A. M. with violent vomiting and purging, accompanied with excessive cramp about the stomach and extremities. I visited her about one hour after the attack, and found her in the most excruciating agony; her countenance, which was healthy the previous day, was so much altered from the sunken eye and livid countenance, that I scarcely knew her; her tongue was cold and partly shrivelled, pulse very weak and hardly perceptible; has not made water since 10 o'clock P. M. yesterday; I treated her exactly in the same way as her daughter, viz. beef tea injections, together with cold water and effervescing mixture, to allay the sickness; hot bottles to feet, at the same time, hot flannels to the surface of the body. Under this treatment the symptoms gradually abated; as the pulse rose, the cramp gradually decreased. The 2nd day I had recourse to calomel to restore the secretions, which was followed by castor oil; and in a short time she perfectly recovered. The number of injections 100.

Case 3.—Mrs. H. Senior, of Oxford-market, aged 76. I was requested to attend at 6 o'clock A. M. on the first morning of September; she was attacked with every symptom of cholera, which was preceded by diarrhœa. The same plan of treatment was adopted, and in the course of a few days she was restored to her former health.

Several other cases equally successful, I could enumerate, if it was not for occupying too much space in your valuable pages. The diarrhœa in most cases subsided within eight hours after the injection was first used; in some of the other cases I have placed ice in the cold water before I gave it to my patients, with success.

THE

**London Medical & Surgical Journal.**

Saturday, Sept. 15, 1832.

PROGRESS AND FATALITY OF  
CHOLERA.

WE are happy to state that cholera has been on the decline during the last week. We have seen several cases of common cholera, which are of frequent occurrence at this period of the year, and which yielded to ordinary treatment. We were called to a case of the epidemic when our last Number was going to press, which from its violent and sudden fatality deserves notice. A gentleman, aged 28, who had lived very freely for three weeks previously, and laboured under chronic diarrhœa was returning through Piccadilly at eleven o'clock in the morning of Thursday week. He arrived at his residence, in the neighbourhood of Covent Garden, at a quarter to twelve. He was then very ill, and a young medical friend prescribed very judiciously for him. Mr. Kenny, of the Strand, was called in, and we saw him at half-past three P. M. He had every symptom of the malignant cholera; every thing possible was done for him, but he expired at half-past four P. M. Dr. Kerrison was also called, but arrived after life was extinct. Such is a melancholy example of the uncertainty of life, and of the mortality of cholera.

## THE CENTRAL BOARD OF HEALTH.

Fas est ab hoste doceri.

IN our last we observed, that the Medical Members of our renowned

Board of Health had been too much occupied with cordons and quarantines, to find time to witness at the bedside, the symptoms and treatment of a disease which has turned out a golden harvest to them. But as it is lawful to be instructed by an opponent, our sagacious friends have issued a circular, with a copy of which we have been duly favoured, couched in much humbler strains, and requesting all who have had practical experience in treating cholera, to communicate what they consider the best plan of treatment. This piece of wise condescension reminds us of the old adage—

Nunquam sera est, ad bonos mores via.

We are highly flattered by the recommendation of the oracle of the Board, that a Travelling Medical Commission should be appointed by Government for the investigation of the nature and treatment of cholera. O! Apollo, Esculapius, and Hippocrates, what a compliment to the Central Board of Health.

## PHENOMENA OF CHOLERA

COMPARED TO THOSE

## PRODUCED BY ELECTRICITY.

DR. HARVING, of Manheim, has addressed a letter to our valued contemporary *la Gazette Medicale*, in which he endeavours to establish the connexion between the effects produced by epidemic cholera and electricity. The effects of both bear the closest resemblance. In the commencement of cholera the patients feel a pricking sensation in the extremities, such as is produced by electricity; spasmodic con-

tractions in different parts, as if caused by an electrical machine; shocks, like those produced by the discharge of a Leyden jar; muscular cramps, such as are excited by galvanism. The electrical effects may be the result of an unequal change in the distribution of the blood. We also remark, that the secreted fluids in cholera contain whitish flakes; and that galvanism will induce such flakes in the aqueous parts of the blood.

This is an ingenious hypothesis; but we are surprized that the author omitted to consider the state of electricity in the atmosphere and earth, and to describe its influence on the human body. The facts he adduces are strongly in favour of the almost universal opinion of the faculty, that cholera is epidemic or communicable through the atmosphere, and not by contagion, or personal contact.

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#### THE ANATOMY BILL.

IN a preceding page will be found a copy of the Anatomy Bill, by which it appears that serious and formidable difficulties are thrown in the way of those engaged in the study of anatomical science. It is enacted, that a medical certificate as to the cause of the death of the person whose body is to be removed for anatomical examination must be obtained; but it seems to be forgotten that the practitioner giving this certificate will naturally expect compensation; but who is to remunerate him the Act saith not. Now, if the person so certifying violates any clause in the Act,

he is liable to confinement for three months, or to a fine of any sum less than £.50; and it is expected he will run this risk without the slightest advantage. In the next place, no one can dissect without a licence from the Secretary of State for the Home Department, or the Chief Secretary for Ireland, as the case may be, under like penalties. We can perceive no reason in this clause, for surely if a body be obtained as directed by the Act, this ought to be enough.

Another piece of legislative wisdom is manifested in compelling the decent interment of the body, after anatomical examination, in consecrated ground, or "in the burial-place belonging to the religious persuasion of deceased." This duty is imposed on the lecturer of anatomy, who will of course be responsible for funeral expenses and burial fees, which will amount on the lowest calculation to from £.3 to £.5 in every instance; and if we add to this the sum which must be paid to relatives, it will appear to all conversant with procuring bodies, that the price will be considerably increased; and, therefore, the study of anatomy rendered much more expensive than before the passing of this Act. The progress of medical science is materially injured by this piece of legislation. The horrible crimes of Burking and Bishoping, and resurrectionists are completely prevented; and no one more sincerely rejoices at this than we do, but we contend that this laudable object could have been as effectually obtained by adopting the laws relat-

ing to anatomy now in force in France and America, which contain no such clauses as those on which we have commented. There is no doubt on our minds, but this Act must be speedily modified and amended.

## Hospital Reports.

### ST. THOMAS'S HOSPITAL.

#### CHRONIC PERICARDITIS.

JOHN GILLIS, aged 21, a shipwright, of pale complexion, but previous to his present illness of good constitution, came into William's Ward of this hospital, under the care of Dr. Elliotson, June 1st. He had, from his own account, been subject to rheumatism, and for six months previous to his admission had experienced darting pains about the heart, with violent palpitation; which was greatly increased either by moving about, or lying upon his left side. At the time of his admission, the lancinating pains were present, there was violent action of the heart, irregular, but no unnatural sound; he had no appetite; bowels regular: he felt no other pain except in the region of the heart.

*C. C. ad 3xx. reg. cordis.*

8.—The action of the heart is less, but the darting pains continue.

*Rep. c. c. ad 3vj.*

12.—Remains much the same.

*Rep. c. c. ad 3vj.*

*R. Vin. colchici 3ss. ter die.*

22.—The action of the heart has been less since last visit; the medicines have excited no other sensible effect.

*R. Vin. colchici ℥xxxx. ter in die.*

27.—The pain returned during the night as bad as ever. This morning, the action of the heart was more violent than it hitherto had been.

*Rep. vin. colchici ut antea. v. s. ad 3x.*

July 10.—The pains have nearly left him; palpitation continues much the same. He is sadly troubled this morning with pain in the epigastrium.

*Pergat in usu vin colchici. Catap. sinap. abdom.*

13.—Pain in the epigastrium relieved by the mustard poultice; the action of the heart not so great as yesterday, beats about 80 in a minute; pulse the same, but not synchronously with the heart; rather irregular.

*R. Hydro-sulph. ammon ℥ij. ter in die.*

16.—The action of the heart less violent, 80 in a minute; more regular; has been very quiet all the morning. Does not complain of the medicines making him sick.—*Pergat.*

17.—His bowels, which had been regular up to the time of his taking this medicine, are now confined; the darting pains which he complains of have entirely left him; pulse 92, more regular, does not beat simultaneously with the heart, which is less violent, but from the slightest exertion it increases. Milk diet.

*Pergat in usu medicamentorum.  
To have house medicine.*

18.—Complains of slight headache; pulse 88, hard and full; action of the heart less; bowels open from house physic.—*Pergat.*

21.—Pulse 80; action of the heart continues to subside, but is not simultaneous with that of the pulse.

*Hydro sulph. ammon ℥ v. ter de die.*

23.—His pulse this morning beats synchronously with the action of the heart, which continues to decrease in violence; but from the least exertion, or lying upon his left side, it increases; bowels kept open by house medicine. *Pergat.*

25.—Action of the heart continues synchronously with the pulse; appetite good, which was not the case before he took this medicine.

*Pergat in usu med.*

29.—Continues to improve; complains this morning of pain about his loins.

*Hydro sulph. ammon. ℥ vj. t. d.*

31.—Rep. med. ad.  $\eta$  viij. t. d.

August 1.—The action of the heart is not much more violent than usual ; it beats simultaneously with the pulse, which is 96 ; has no pain ; appetite good ; still obliged to have recourse to house medicine, to open his bowels.

*Hydro sulph. ammon m. x. t. d.*

10.—The medicine has been gradually increased up to this time, from which he appears to find great benefit ; he can now bear a little exertion, without bringing on the action of the heart more than ordinary.

*Hydro sulph. ammon m. xv. t. d.*  
*Cold shower bath daily.*

18.—Since last report, the medicine has been gradually increased up to *m. xx.* three times a day ; his appetite remains good ; has got very stout since he began to take this medicine. Dr. Elliotson finding him quite well, discharged him.

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#### HOPITAL DE LA PITIE.

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#### *Endemic Purulent Ophthalmia.*

(From our Special Reporter.)

IN the communication which I sent you some time since, relative to the endemic purulent ophthalmia which had attacked 299 out of 300 children at the Asylum for the Orphans of those who had died of cholera, I omitted mentioning, that the opinion of the medical men here was most favourable as to the mildness of the former disease, in fact their prognosis was that "*la marche de la maladie ne serait pas grave.*" This flattering anticipation I am sorry to say has not been verified ; on the contrary, the affection has been extremely malignant, obstinate and fatal, if not to life, at least to that which renders it of paramount enjoyment, viz. the blessing of sight, which in many instances has been totally or partially destroyed. One of these little sufferers at the Hopital de la Pitie, a girl 9 years old, a short time since, it can not positively be said from the effects of the ophthalmia, as upon the autopsic exam-

ination an extensive development of tubercles was found in the left lung, and the existence of which had been ascertained a few days previously by means of percussion of the chest, which yielded a dull sound, (*la matité*) on the side of the affected, although the little girl upon admission into the hospital exhibited not the slightest of phthisis pulmonalis, and seemed in perfect health, with the exception of the ophthalmic affection. It should however be observed, that about four or five days before her decease, the sight of both eyes was totally destroyed. Two of the thirteen girls, brought to the above named establishment on the 31st July, have lost the sight of one eye each, eight have been discharged cured, and there remain four still in the hospital, labouring under the chronic form of the disease. I understand that several of the other children belonging to the asylum, and who had been placed in various hospitals, have also permanently lost the use of their sight. With respect to the methods adopted for combating this severe malady, M. Piory, one of the physicians at the Hopital de la Pitie, came to the conclusion, that both the antiphlogistic and stimulating plans were of no utility in the present instance ; and that the milk and water and mild, that is to say purely *hygienic* remedies, were the best. He subsequently had recourse to compression upon the eyes, and which in his opinion had been attended with the most success ; it must however be remarked, that from the numerous methods adopted in rapid succession, it would be unsafe to attach to the last named mode, a curative character at a period when the disease might be said to have worn itself out, or got under by the single or combined effects of some of the other applications. From what I have seen of these cases, and several others, I am rather inclined to think that the medical men of this country have not as yet fixed upon any certain theory as to the nature of ophthalmia in its various forms, or arrived at any successful mode of treatment.



*Polypus Uteri cured by excision.*

PIREVAL, aged 40, dress-maker, of a pallid yellowish complexion, was admitted at la Pitié, under the care of M. Valpeau, the 21st of March, 1832; states she has been subject to a sanguinulent discharge from the vagina, the last 16 months, which she attributes to cold and exposure to rain, during the last four months; coagulated blood has escaped from time to time, and she has lost flesh considerably.

On examination, a large hard somewhat elastic pyriform tumour was detected in the vagina, it had much dilated the os tinæ, and could be traced into the uterus from the posterior parietes, of which organ it seemed to arise; the pedicle was much harder to the touch anteriorly, and to the right, than posteriorly, and to the left, it seemed to prolong itself most.

24.—Yesterday had complained of tenesmus, and states that a large coagulum of blood had escaped, feels much weaker than on her admission; she was ordered a mixture of ext. ratanhiaæ and infus. of peppermint; and a mixture, containing a gr. of acetate of morphine, to be taken in divided doses during the day.—Three soups.

25. & 26.—Slight amelioration, medicines continued.

27.—To-day, after examination, M. Valpeau seized hold of the polypus as near as possible to its attachment with the *pincés de museux*, then giving it to an assistant, ordered slight traction to be made, in order to bring down the pedicle as low as possible, whilst he divided the neck with a bistoury, guarded to near its point by an envelope of linen; scarce any blood was lost, and the patient suffered but little.

The tumour has the size and shape of an adult uterus; on dissection, is found to contain two cavities filled with a thickish brown fluid; the tissue of the polypus is fibrous, or rather

fibro-cartilaginous; the parietes of the cysts are thickest.

28.—Slight fever, and discharge by vagina; diet and mint mixture continued; no untoward symptoms arose; the discharge ceased under an injection of honied barley water, and on the 10th of April, the patient was discharged, cured.

Fambour, — aged 40, a dress-maker, admitted under the care of M. Valpeau, July 31st, states, that she has had four children; the first at 30, the other three at intervals of two years, who are since dead; was ever regular; never been the subject of any malady. After her last confinement, experienced difficulty during coition; evacuations passed without difficulty, and bowels regular; a midwife informed her that she laboured under inversion of the uterus, and that in time it would resume its proper situation; the last 22 months has had a continual bloody discharge, sometimes a quantity of blood suddenly escapes, at others, the discharge presents divers colours. Since three months the polypus has protruded on going to stool; complains of weight at epigastrium, and bearing down; shortly before admission had diarrhœa, which has ceased.

On examination, an enormous mass, the size of the fist, is found to protrude from the os tinæ, which it has dilated, and made its way into the vagina. The mouth of the womb can be felt surrounding the neck of the tumour, but the pedicle cannot be reached.

August 10.—After palliative treatment, which afforded little relief, M. Valpeau examined the patient this morning, and performed the operation of excision as in the former case; on cutting through the pedicle, a slight crackling noise was produced.

The shape of the tumour is that of a compressed or baked apple; on section it is found to consist of two parts, one the envelope, a fibrous membrane inadherent to the contained body, which is elastic and fibrous, and of a tissue analogous to

that of the uterus, and emits a crackling noise under the scalpel. The pedicle is of nine lines diameter, contains no perceptible vessels, scarce any bleeding during the operation.

M. Valpeau thinks these tumours are primitively an effusion of blood in the tissue of the uterus; the fluid part becomes absorbed, the fibrine organized, and commencing its increase, envelopes itself with a portion of the structure of the womb, which forms a kind of cyst according as the effusion occurs to the internal or external surface of the organ, a fibrous tumour is developed towards the abdomen, or a fibrous polypus, as in the case narrated.

M. V. uses section to all polypi, even to the vesicular, except when vessels of magnitude are detected around the pedicle.

The patient experienced no inconvenience after the operation, and gradually mending, left the hospital on the 29th well.

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#### HOPITAL DES VENERIENS.

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##### *New and Certain Method of Diagnosis in Syphilis.*

(From our Special Reporter.)

M. RICORD, one of the visiting Surgeons at the Venereal Hospital, has lately adopted a novel mode of diagnosis in supposed cases of syphilis, which must form a new era in the history and treatment of that formidable disease. His plan is nothing more or less than inoculation of the supposed venereal virus, taken from the part affected with chancre &c. &c. and introduced into the cellular tissue, at a short distance from the seat of the disease, and in the same manner as vaccination is performed. He considers this by no means an unjustifiable or dangerous experiment, inasmuch as it is tried upon the patient himself; and in case of the absence of a venereal taint, no development of disease can follow; if, on the contrary, the affection is of a truly syphilitic

type, in the course of a few days a well marked venereal chancre or sore will make its appearance, which does not add much to the patient's sufferings or disease, as its progress and cure will not be more prolonged than the original affection, but with the decided advantage of removing all uncertainty from the practitioner's mind, and either in the one case of relieving the patient from an *awful* anxiety, or in the other letting him know the worst at once, and making him submit to a proper line of treatment. This new method was tried about a week ago upon a female in one of the wards, and in whose case doubts were entertained as to the syphilitic character of the disease. The matter from an apparent chancre, was introduced upon the point of a lancet into the cellular tissue upon the inside of the thigh, about two inches from the groin, and in the course of five days, a sore presenting all the standard characters of venereal chancre made its appearance at the inoculated part; this removed all doubts, and a mild mercurial treatment was instantly commenced, the results of which, and the course of other experiments of a similar object, I shall forward to your valuable and independent Journal at a future period.

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#### CHOLERA HOSPITAL AT ST. HILIER'S.

*Jersey, Sept. 7th. 1832.*

[We have been favoured with the following facts by Mr. Foote, Surgeon, of Tavistock-street, Covent Garden, which were forwarded by his son, Mr. Foote, jun. who is one of the medical officers of the above hospital.—Eds.]

THE cholera broke out on 10th August, and on the 12th, the hospital was capable of receiving patients. Though the Cholera Act does not extend to this island, its provisions are adopted, and the sick are separated from the healthy. Of 110 patients in this hospital, I was under

2 years of age, 3 between 2 and 5, 15 between 5 and 15, 31 between 15 and 25, 11 between 25 and 35, 25 between 35 and 45, 13 between 45 and 55, 7 between 55 and 65, 3 between 65 and 80, and 1 at 84.

Of 58 deaths from cholera, or sequelæ, one patient was between 2 and 5 years of age, 4 between 5 and 15, 13 between 15 and 25, 7 between 25 and 35, 15 between 35 and 45, 7 between 45 and 55, 2 between 65 and 80, and one at 84.

The hot air bath has been tried with partial success; it caused reaction, but collapse supervened on the removal of the patient. There is no premonitory diarrhœa, the cholera comes on suddenly, is more rapid and violent than in London.

Dr. Streuve asserts that there were three cases of the disease before the 10th of August. The lower classes are very intemperate here, as some of them take 20 or 30 glasses of brandy every day, in consequence of the cheapness of ardent spirit. The mortality is about the same as in London.

#### ACADEMY OF SCIENCES.

##### *Domestic Economy—Dietetic Gelatine.*

M. D'ARCET addressed the following letter to the Academy. The attention with which the meeting listened at its last sitting, to the extempore lecture of M. Edwards on the gelatine, makes me hope that it will not receive with indifference the information which follows, and which gives an exact idea of the points to which the practical part of the question of the dietetic employment of the gelatine, procured from the fat of the bones, has reached. To this present date the apparatus of the Hospital St. Louis, which has been in use for two years and a half, without interruption, has furnished the dietetic department of this hospital with 819,000 rations of gelatinous solution, and 1,688 kilogrammes of the fat of bones. This great quantity of nou-

rishng food, obtained at little expense, has considerably decreased the expense of food for the Hospital of St. Louis, and has even permitted the gratuitous distribution of soup à la gelatine, every Sunday to the poor in the quarter. The long period of time (two years and a half), during which this apparatus of the Hospital St. Louis has been in use, the very favourable reports which its use has procured, and the eagerness with which the poor participate in its distribution, show the manner in which it is conducted, and proves, methinks, without reply, the advantage which would result from this mode of diet where it is well appreciated and well conducted.

M. Magendie was desirous that the Academy should make analysis of the air taken at different points of Paris, in order to discover whether the atmosphere had experienced for some time an alteration in its chemical composition, an alteration which certain physicians admit, and which may furnish them with the cause of the present epidemic.

The Academy, agreeably to this demand, nominated a commission, composed of Messrs. Thénard, Gay Lussac, and Serullas. At the demand of these three academicians, M. Magendie was added to the commission.

#### NEW THEORY OF HEARING.

*Sitting of August 13th, 1832.*

(From our Paris Correspondent.)

M. BRESCHET read an abstract of three elaborate memoirs, two of which were relative to the organ of hearing.

This gentleman has for a long time been engaged on an anatomical and physiological history of the organs of sense, and has already presented to the Academy, one memoir on the nerves of the tympanum in mammiferous animals, birds, and reptiles; and another on the structure of the ear of fishes. The first of those now read treats of the internal ear, and of the sense of hearing in man and the vertebrated animals; and,

1. He shows the distinction between the osseous and the membranous labyrinth.

2. He divides what we confound together under the name of semicircular canals into *semicircular tubes*, the membranous lining, and the *semicircular canals* properly so called, consisting of the osseous part which encloses the tubes.

3. In the vestibule also he distinguishes the *median* or *cetricular sinus*, from the *sac* or *sacculus*; and shews the existence of two other pouches besides these, which he calls respectively *aysticule* and *utricule*.

4. He proves that the labyrinth contains two kinds of liquids, the one external to the membranous tubes and pouches of the vestibule, the lymph of Cotunnus, the *perilymph* of the author; the other enclosed in the interior of the membranous pouches, the *vitrine auditive* of M. de Blanville. Neither the simultaneous existence, nor the distinct nature of these two liquids had been before sufficiently established.

5. He points out that in this *vitrine auditive* are suspended in *reptiles*, *birds*, *mammifera*, and even in *man* himself, little pulverulent masses, analogous to the calculous concretions (otolithes) of *osseous fishes* and to the pulverulent masses (otoconies) of *cartilaginous fishes*. These calculous substances, which it would seem ought to fulfil some important office in hearing, have not been hitherto demonstrated, except in the ears of fishes. M. Breschet is the first who has ascertained that this state of things exists in *all vertebral animals*.

6. The author shews that the membranous labyrinth does not touch the osseous walls, the *sac* being prevented coming in contact with the inner side of the membrane of the *fenestrum ovale*.

7. He points out as a necessary consequence of this disposition, that it is by the intervention of a layer of liquid (the perilymph) that the sonorous undulations are transmitted to the *membranous labyrinth*, to the *vitrine*

*auditive*, and to the *pulverulent concretions*.

8. He demonstrates that it is always in points corresponding to these masses, (which are calculous [*lithoid*] in the osseous fishes only, and pulverulent in all the other vertebrata) that the filaments of the *portio mollis* terminate. We will speak farther on of the opinions he had been lead to form relative to the reason of this fact.

9. The author proves that the *aqueducts* are not *diverticula*, or canals destined to admit of the reflux of the perilymph, occasioned, as one would suppose, by the reflux of the too powerful sonorous undulations, and he conceives that they are for the purpose of containing the blood-vessels, in the same manner as the umbilical vessels of the fœtus are contained in membranous canals. The truth of this is more evidently exemplified in those animals in whom the substance of the labyrinth constitutes a distinct mass, which is separate from and formed by an entirely different structure from the osseous tissue of the temporal bone, as for example, in the *cetacea*.

10. He considers that the *infundibulum* is not a distinct cavity, but is formed solely by the tall-turn of the *lamina spiralis* at the top of the *cochlea*, which there inclines towards a central orifice.

11. M. Breschet describes the auditory nerve as divided into two fasciculi, one *anterior*, which is accompanied by the *facial*, and which gives filaments to the two anterior ampullæ, in the situation of the calcareous concretion; and one *posterior*, which after furnishing a filament to the posterior ampulla, supplies the *sac* and *cochlea*.

The author has deduced the following physiological conclusions from his researches:—

1. That the *vestibule* is the most important part of the organ.

2. That the other parts of the ear are formed either for the better *reception* of sounds, or for their more perfect *perception*.

3. That from the circumstance of there being two kinds of liquids from the situation of the membranous labyrinth, and of the terminal filaments of the auditory nerve, it results that the sonorous undulations can only produce an impression on these nerves through the intervention of the surrounding liquids.

4. That the *perilymph* is for the purpose of stopping the vibrations of the walls of the membranous vestibule itself, and of the semicircular tubes, and that the concretions which we find in the *vitrine auditive* arrest in the same manner the vibrations of this liquid.

5. That from the presence and disposition of these concretions, as well as that of the two liquids and of the membranous labyrinth, the reverberation, prolongation, and hence the confusion of sounds in the ear is prevented in consequence of an action similar to that of the *damper* of a piano-forte.

The other memoirs treat also of the organ of hearing, but they relate to its structure in fishes only.

It may be necessary here to state, that anatomists have been divided in opinion relative to the existence of an opening communicating externally in these animals. Geoffrey St. Hilaire and Monro speak in the affirmative on this point. Comparetti doubted their existence, and Scarpa formally denies it. The great Cuvier, not having time himself to make the necessary researches, engaged M. Breschet to undertake them. This anatomist has assured himself, by careful dissections, that in many of the *chondropterigia* there exists an opening towards the upper and back part of the head, which is closed by a membrane, and this again by the common integument. This opening has been accurately described by several authors. It communicates internally with that part of the labyrinth which contains the perilymph; that is to say, it terminates on the outside of the membranous labyrinth. Some have considered it to be analogous to the *fenestrum ovale*, or the fenestrum

of the vestibule, others to the *fenestrum rotundum*, or that of the cochlea.

There exist also several other apertures with which the author has endeavoured to make us acquainted, and of which the following is a description:—

From the membranous labyrinth, and more especially from the sac containing the concretions, a canal ascends traversing the cartilaginous walls in its way to the skin, beneath which it is embraced by a small muscular apparatus, and having pierced the ligaments, terminates externally by one or more openings. This canal exists in the chimacræ, and more especially in the antarctic chimera—*chimera callorinchus*, but he has also found it in the *rays*, the *torpedo*, the *cramp-fish*, &c.

M. Breschet describes also a little pouch that the *esoces*, and more particularly the *esor-lucius*, present at the posterior part of the sac containing the concretions. And he endeavours to prove that this pouch is the rudiment of a canal of communication which exists in many other fishes between the membranous labyrinth and the swimming bladder, as in the *caprini* (carps), the *despeæ* (herrings), the *cobites* (loaches), and the *siluri*.

This little pouch of the membranous labyrinth has been considered by some anatomists as the rudiment of a cochlea, but M. Breschet regards this opinion as untenable—first, because the cochlea is placed anteriorly, whilst this pouch is found posteriorly; and secondly, because the cochlea exists only in those animals which are provided with a vocal apparatus, and consequently with one fitted for the respiration of air, which it is unnecessary to say does not exist in fishes.

Besides having rendered the description of the organ of hearing in fishes more complete, and the rectification of many erroneous opinions which were in existence respecting the structure of this part, M. Breschet has shewn, in these memoirs, that the form of the auditory apparatus in this

class of animals is more liable to variation than in the mammiferæ and birds. He arranges these modifications into five principal types.

1. The first type, which is peculiar to the *cyclostomes*, has been described by our author in another memoir on the ear of the *lamprey*. It consists of a simple sac, containing a liquid and a calculous concretion. In this there is neither division, nor any appearance of canals, or semicircular tubes.

2. The second form is that which we find in the *rays*, the *chimeræ*, &c. Here we have a sac containing a lithoid concretion, and several apertures, some of which are closed by a simple membrane, others are constantly open and communicate with the exterior.

3. The third includes the ear of the *squalæ*, *lamnæ*, *mormyri*, *lepidoleprij*, &c. It presents some simple openings, or *fenestræ vestibuli*, closed by membranous expansions, or by the rudiments of a chain of ossicula, two sacs containing concretions, and some membranous semicircular tubes. The principal characteristic of this type, is the existence of openings, closed by membranes, which establish mediums of communication between the external surface and the labyrinth.

4. The fourth variety, is at the same time the most simple and of the greatest extent; it belongs almost exclusively to the osseous fishes, and consists of two vestibular sacs and three semicircular tubes, but up to the present time we have been unable to discover here any external opening, whether closed or otherwise.

5. Lastly, in the fifth type, we place all those fishes whose membranous labyrinth communicates more or less directly with the swimming bladder; of this the *herring*, the *carp*, the *loach* and the *silurus* afford us undeniable examples.

## EFFICACY OF HYDROCYANIC ACID IN CHOLERA.

By JOHN JONES, Esq. Surgeon,  
Kidderminster.

So many remedies have been proposed for cholera, that I should not think of calling your attention to a new one, if I were not convinced of its great efficacy in this dreadful malady. The remedy I allude to, is the hydrocyanic acid. Having had considerable experience in the disease, since its appearance in Kidderminster, as an epidemic, I have no hesitation in saying that it is by far the most beneficial medicine that has yet been made use of in this complaint. It has been for some time known to the profession, that hydrocyanic acid will stop vomiting; whether it arise from an affection of the stomach itself, or from sympathy with some other diseased organ; but I am not aware that it has been generally used in cholera. All the symptoms of this epidemic, prove in my opinion, that the *poison* acts primarily upon the nervous system, and through it upon the blood and all the secretions; and it is reasonable to imagine, that the remedy most likely to be of service, should also act through the nerves; and we know that the prussic acid does so act. But, whatever theory may be formed of its action, experience and observation have proved to me, that it has the effect of immediately arresting vomiting in cholera, as well as in other diseases. This action of the prussic acid is certain; but I am inclined to believe that it has other powers of a more extensive nature; as in some cases, patients have recovered from its use alone; this of course, is a matter of speculation, and open to further investigation. By arresting the vomiting in cholera, the most important results are obtained:—1st, the further loss of the serous part of the blood is

prevented; 2ndly, we are enabled to make use of other remedies without any danger of their being rejected by the stomach; 3rdly, we can, if occasion require, administer a due proportion of nutriment with advantage. The plan of treatment which I adopt, is, for adults, as follows:—I prescribe from two to four drops of Gardener's medicinal prussic acid every half or quarter of an hour, till the vomiting ceases, and then from four to five grains of calomel every three or four hours till the mouth becomes sore. The following enema, recommended in the *Cyclopædia of Medicine*, will usually check the purging; laudanum a drachm and a half; brandy four ounces; gruel a pint and a half: prussic acid does not preclude the necessity of bleeding, where the patient is seen at the commencement of the attack. In children the prussic acid is as efficacious as with adults, and perhaps more so, as they will always take it on account of its not possessing a disagreeable taste.

Had I been acquainted with the use of prussic acid in cholera, when the disease first broke out in Kidderminster, I feel no doubt, but that I should have saved the lives of many, who, as it was, fell victims to it. It is for this reason that I am extremely desirous that its efficacy should be made known, through the medium of your *Journal*.

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ON THE EFFICACY  
OF THE  
HOT AIR BATH IN CHOLERA.

By JOHN JAMES HALLETT, Esq.

Yoxford, Suffolk.

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THE meeting with your remark in the last Number of your valuable periodical that "there is no mention made" by the Central Board of Health of the "hot air bath," &c. &c. well

known to many who have had actual experience in treating cholera, has induced me to forward to you a sketch of a case which occurred in my practice within the last month, and in the treatment of which, I think the first remedy you have enumerated, proved, in a most marked manner, efficacious in conjunction with others.

I was called on Wednesday, August 15, at half-past nine A.M. to I. Andrews, of Middleton, at about a mile from me, whom I found dressed, but unable to support himself in his chair from pain. The countenance was so altered, from shrinking of the features and extreme blueness, that his employer could scarcely recognize him. He complained of violent cramps in the arms and legs, and the left side of the thorax, which with diarrhœa, had been present since half-past four in the morning. The extremities were all semiflexed, while the cramps continued (for there were short intervals of ease), and the gastrocnemii might plainly be felt contracted into a form almost spherical. The eyes were shrunk within the orbits; the expression of the countenance betrayed the greatest anxiety; pulse, a mere thread, and 106; voice lost; secretion of urine suspended; inspirations fifteen in the minute, and laborious; breath unnaturally cold. There was universal cold of the surface without any difference of temperature, even in the femoral or cardiac regions; nails buried in the palms, and fingers incapable of extension.

On my reaching him he had had about twelve stools of a transparent inodorous fluid, passed without pain, and very like chicken broth in appearance, with an entire absence of bile; vomiting not violent; slight tenderness in the region of the stomach; secretion of urine suspended. I rode home as fast as possible, and on my return, which was within the half hour, found that he had passed four more liquid evacuations of the same character as the former, and that the cramps of the extremities, &c. were more frequent and violent.

I immediately employed a hot air bath, which I had had constructed under my own eye, and on my own plan, a few days before; and within ten minutes, had the satisfaction of seeing the perspiration flow down my patient's cheeks, with the thermometer in the bed at 110° Fahr. During the operation of the bath, I gave a draught; composed of æth. sulph. solutio camphor saturat. in alcohol; tr. opii. ammoniat. and tr. valerian ammoniat. a. gtt. xxx. This I repeated every hour, until the pulse had become strong, and at 96, which was established at two P. M. Alternately with the draught I gave a bolus every hour, of hyd. protoxyd. gr. iv. and pulv. g. opii. gr. j. The boluses I continued, until the gums were affected, and that occurring at noon on the Friday, they were discontinued. On Thursday, at four, P. M. I gave p. rhei. gr. x. and continued it every eight hours till the same time on Friday, when a very copious, bilious, feculent evacuation was passed, and another the next morning, after which all went on well; my patient gradually recovered his strength, so as to be able to leave his house within the week from the day of the attack.

This I conceive to be a case in which the hot air was of the most signal service, and as my apparatus for its application cost me but half a guinea, I think no practitioner should be without one. Doubtless the stimulus taken internally contributed much to the establishment of reaction, and I am of opinion, that the action of the mercury once secured, any case of cholera may be considered safe.

## NECROLOGY.

SIR EVERARD HOME, whose death is announced as having taken place on Friday, at his apartments in Chelsea College, was one of the most eminent medical men of his day. He was of ancient Scottish lineage, and at an early age embraced the profession of physic, which he practised with the greatest success in the metropolis for more than

forty years. His late Majesty, when Prince Regent, raised him (Jan. 2, 1813) to the dignity of a baronet, by the title of Sir Everard Home, of Well Manor Farm, in the county of Southampton, and also conferred on him the appointment of Serjeant Surgeon, in which office he was continued by the present King. Sir Everard was also Surgeon to Chelsea Hospital, Honorary Professor of Anatomy and Surgery to the Royal College of Surgeons; for many years he was elected to the Presidentship of the College. Sir Everard was in his 77th year, having been born in 1756. He succeeded in the baronetcy by his eldest son James Everard (now Sir James Everard Home) a Commander in the Royal Navy.

## MEDICAL APPOINTMENTS.

Mr. Brodie is appointed Serjeant Surgeon, in the room of Sir E.; and Mr. Keate succeeds to the Chelsea Hospital.

Mr. Stanley has been elected one of the Council of the Royal College of Surgeons, in the place of Mr. Hawkins, who has resigned.

## BOOKS.

Practical Observations in Midwifery, with a Selection of Cases. Part II. By John Ramsbotham, M. D. Consulting Physician; Accoucheur to the Royal Maternity Charity, &c. &c. 8vo. pp. 507. 1832. London, Highley.

This is one of the best practical works, so far as it extends, hitherto published.

Pestilence Disarmed; an Essay Physical and Moral, on the Means best adapted for the preservation of public health in times of national calamity. 8vo. pp. 31. 1832. London. Longman and Co.

Five Minutes Advice on the Care of the Teeth, and on the best Means of preserving, recovering, and when lost, restoring them. 12mo. pp. 40. 1832. London. Renshaw and Rush.

The Principles and Practice of Obstetric Medicine, in a series of Systematic Dissertations on Midwifery, and on the Diseases of Women and Children, illustrated by numerous Plates. By David D. Davis, M. D. M. R. S. L. Professor of Midwifery in the University of London, &c. &c. London, Taylor. 1832. Part XI.

Die Gebärmutter und das Ei des Menschen in den ersten Schwangerschaftsmonaten nach der Natur dargestellt, von Dr. Burkhard Wilhelm Seiler, mit zwölf kupfer tafeln. Dresden, 1832.—The Uterus and Ovum of Woman, in the First Months of Pregnancy; drawn from Nature. By Dr. B. W. Seiler. Twelve Engravings. Dresden, 1832. Folio, Twelve Coloured Engravings. London, 1832. A. Schloss, St. Martin's Lane.



The drawings of the first four and of the tenth plates were laid before the Assembly of the German Naturalists at Berlin in 1828, where they were received with particular approbation by Professors Rudolphi and Tiedemann. These plates are splendidly engraved, and supply the deficiency of those of Dr. William Hunter. Lecturers on obstetrics will find them extremely valuable. The zeal which Mr. Schloss evinces in importing all new foreign works, and a variety of the best anatomical models, entitles him to the patronage of the profession.

Further Observations on Spontaneous Amputation of the Limbs of the Fœtus in Utero. By William F. Montgomery, M.D. M.R.I.A., Professor of Midwifery to the King and Queen's College of Physicians in Ireland. Illustrated with a Plate.

This is the second case of the kind observed by the Learned Professor, and examined by other medical friends. During a late visit to Dublin, we were favoured with an inspection of both preparations, and can add with perfect truth, that we have never seen so complete and so extensive a collection of obstetric specimens as in the museum of Dr. Montgomery. It is gratifying to add, that all were collected and arranged by himself.

Experimental Inquiries in Chemical Philosophy. Part I. (complete in one volume.)

On the Blood, with an Appendix, containing Remarks on the Nature and Treatment of Cholera Asphyxia. By Horatio Prater. 8vo. pp. 304. London, 1832. Highley.

La Junte des Xijj contre l, Petite Conspiration, contre la Bourse des Malades, ou le System de Remise, dévoilé au Profit de la Sante. 18mo, pp. 33. Paris, 1832.

This is a despicable lampoon on certain English physicians in Paris.

#### NOTICES TO CORRESPONDENTS.

*Thomas a Becket.*—We regret that Mr. Sheldrake has not kept his promise to conclude his paper on the treatment of distortions. His omission is no fault of ours.

*A Falmouth Correspondent.*—If our correspondent will refer us to some one in town, his name shall appear. We are much flattered by his favourable opinion of our writings.

*A Georgian.*—Our esteemed correspondent will oblige us with a personal interview, any morning before 12.

*A Country Assistant.*—Richard's Botany, Castle's Manual. The other work referred to is an imperfect abstract.

*J. V. L.*—A personal interview is desirable.

*Mr. J.*—We are much obliged by the offer, and shall accept it.

*Dr. Hancock's* communication will appear in our next; several other articles are too late for this Number.

The members of the profession, who consider the damages awarded in the case of *Ramadge v. Ryan* excessive, have commenced a subscription to enable the defendant to apply for a new trial, or defray same.

#### SUBSCRIPTIONS RECEIVED.

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W. J. Rose, Esq.	1	1	0
Dr. Copland	1	1	0
A Friend	1	1	0
A. B.	7	1	0

SELECTIONS  
FROM THE  
CLINICAL LECTURES,  
DELIVERED AT THE  
HOTEL-DIEU IN PARIS,

*During the Session of 1831 - 32;*

BY BARON DUPUYTREN,

PRINCIPAL SURGEON OF THAT HOSPITAL.

*The Excision of Hemorrhoidal Tumours.*

*Second Observation.*—About fifteen years ago, a very wealthy banker, about 45 years of age, of a bilious temperament, consulted the Baron Dupuytren for hemorrhoids that were constantly in a state of hemorrhage. These sanguineous discharges had reduced him to a state of great debility and anemia. Pale and debilitated, he visibly emaciated; he was unable to attend in his counting house; to write a letter was very fatiguing, and almost impossible to him. M. Dupuytren, after examining him, recognised the existence of internal hemorrhoids, and proposed excision, which was quickly agreed to. Some days after he proceeded in the following manner:—The patient having taken an enema and a hip bath, lay on the edge of the bed, the thighs separated; violent strainings protruded the hemorrhoids, which were immediately seized with a forceps with large blades and excised, not without much trouble; no external hemorrhage manifested itself. M. Dupuytren did not leave the patient; at the end of a quarter of an hour he perceived him become pale, fall into a state of weakness more and more decided, the pulse became small and hard, a cold perspiration covered his body, he felt a sensation of heat in the abdomen, which was continually ascending. From these signs the Professor could not doubt that internal hemorrhage had ensued. He immediately recommended the patient to make expulsive efforts, and

a great quantity of scarcely coagulated blood was discharged; cold injections were useless, the hemorrhage was not stopped: then a pig's bladder stuffed with *charpie* was introduced; this succeeded completely, but it was not without great difficulty that it could be kept in its place, involuntary expulsive efforts tended incessantly to displace it, and actually did so several times. This hemorrhage weakened the patient very much, and would undoubtedly have been fatal if it had not been arrested so promptly; in a short time the cure of the patient was completed.

*Third Observation.*—The banker, whose case we have just considered, had a brother at Berlin, who had almost the same symptoms; this person heard of his brother's cure, and wrote to M. Dupuytren. After the report of a celebrated surgeon of Berlin who attended him, M. Dupuytren was quite convinced of the existence of similar internal hemorrhoids, and recommended excision. But the accident that happened to the first brother had suggested to him a means of effectually stopping the hemorrhage, and, consequently, obviating the greatest danger attendant on this operation. He gave written directions, and advised cauterization, with a *cauterie en haricot* if the hemorrhage manifested itself. The surgeon at Berlin did not follow these directions; immediately after the operation he quitted the patient. Not long after his departure, symptoms of internal hemorrhage presented themselves; the patient became faint, pale, and covered with cold perspiration. One of his younger brothers, who had been present at the first operation, discovered the cause of the malady, and sent after the surgeon immediately, without being able to find him; time was lost, and the danger was imminent; this young brother had the presence of mind to introduce the bladder, as he had seen it done, into the anus, and stuff it with lint, and succeeded in stopping the hemorrhage, but the loss of blood was so great, that the patient was a long time before he recovered.

*Fourth Observation.*—A broker, the father of a numerous family, suffered for some years

from internal and external hemorrhoids, by which he was more and more incommoded; he was in such a state as to be unable to walk more than sixty paces without stopping to lean against a stone stud, to gain a momentary relief from his sufferings. Finding that he was obliged to give up his business, and wishing at any price to preserve the power of providing for the wants of his children, he came to M. Dupuytren, who examined him, and perceived a double hemorrhoidal tumour, being in every way two inches and a half in diameter; blood and pus were discharged frequently, and the scirrhous disorganization appeared very great. M. Dupuytren proposed excision to him. Some fatal cases which recently happened under other surgeons, having made great noise, and this man having heard of them, the proposal made him shudder. M. Dupuytren had great trouble to convince him that cauterization of the vessels was sufficient to obviate all fatal consequences. At length the patient consented to allow the operation; but he wished to go to the Hôtel Dieu, as he would be better watched, and in order that at the first appearance the hemorrhage might be combated. The excision was made, some of the vessels were cauterized, and on the twelfth day the patient was perfectly cured.

*Fifth Observation.*—M. Ex—a Scotchman, a cavalry officer in the service of the King of England, unmarried, about forty years of age, of a sanguine temperament, experienced, for more than three years, great sufferings, caused by internal hemorrhoidal tumours, which protruded on the least attempt to go to stool. As the fatigues of his profession considerably augmented the annoyance, he came to Paris to consult M. Dupuytren. In compliance with his advice went into a *Maison de Santé*, where he was operated on by this celebrated surgeon, in the following manner:—The patient lay on his side, and made efforts as if at stool; the upper thigh was raised up by an assistant; the operator seized each tumour with a large indented forceps, and with a very sharp bent scissors, excised them successively. There were three tumours, not very voluminous, and as there was but a trifling effusion of blood, M. Dupuytren thought that cauterization might be dispensed with. An assistant was charged to remain with the patient, who was perfectly calm. About five hours after the excision, all the characteristic symptoms of hemorrhage in the rectum were manifested; anxiety, rigors, inclination to vomit, cold perspiration, sinking of the pulse, convulsive contraction of the limbs, inexplicable agony, vertigo, syncope; tenesmus increasing the patient went to stool, and the expulsion of a considerable quantity of partly coagulated blood gave him visible relief. A cold enema was administered, as M. Dupuytren had directed in such cases; it was returned immediately, and replaced by another that was longer retained. Nevertheless,

at the expiration of about an hour, the symptoms returned with increased intensity; they produced complete collapse. The patient requested a notary would be sent for, and hastened to arrange his affairs, preferring death, which he thought was inevitable, rather than submit to cauterization. Dr. Caillard and Dr. Marx took the responsibility on themselves; they endeavoured to tranquillize him; and it may readily be imagined that it was not easy to cauterize under these circumstances. With the aid of a *speculum*, the place from whence the blood flowed was easily found, and the effusion stopped by the application of a bent *cauterie en haricot*, heated to a white heat. The hemorrhage ceased; the alarming symptoms were dissipated; the inflammation which results from the cauterization, and the dysuria that usually accompanies it, yielded very soon to the use of cataplasms, enemata, and baths; a wick was kept in the rectum, and at the end of a few days the patient was perfectly cured.

*Sixth Observation.*—Mr. Joseph Cur—of Polish origin, a singer at Amsterdam, forty eight years of age, for several years suffered great pain in expelling the fecal matter. This difficulty was caused by the presence of internal hemorrhoids, which all together were about the size of a hen's egg. During the act of defecation they protruded, and caused a very painful strangulation, which was very difficult to reduce.

These tumours were not accompanied by habitual nor periodical discharges, only when the patient had a constipation; the hardened excrements, occasioned by their pressure, an erosion that gave rise to a slight discharge of blood. Forced by his profession to long standing, and to exertions of the voice that augmented his disease, and his sufferings, he resolved to travel to Paris, in hopes of being cured. M. Dupuytren made him go into a *Maison de Santé*, where, two days after, he was operated on. The patient lay in a convenient posture; the tumours, three in number, being protruded, were immediately excised. What is remarkable in this case, is, that notwithstanding the large volume of the tumours, the excision caused but a slight effusion of blood, and did not require the cautery. A year after his cure we had occasion to see this patient, when there was no failure in the success obtained with an astonishing promptitude. These observations we owe to the complaisance of Doctor Marx; we will, in conclusion, add one communicated by our benevolent colleague, Doctor Paillard.

*Seventh Observation.*—A man, about forty-seven years of age, of low stature and sanguine temperament, came to the Hôtel Dieu, to be treated for internal and external hemorrhoids, with which he had been afflicted for fifteen years. These tumours were so painful that he could take very little exercise, or run for any distance, without causing protrusion of the internal hemorrhoids, which

became irritated immediately by the friction of the dress. Repeated inflammation caused a discharge, sometimes sanguine, sometimes purulent, sometimes both one and the other. The act of defecation was a continual torture to the unhappy patient. Should the fear of those accidents that may result from the excision induce us to leave the patient a prey to this disastrous infirmity? The frequent returns of inflammation of the hemorrhoidal tubercles will bring on disorganization. Besides, it is almost certain that the sanguine and purulent discharges would undermine the patient's constitution, and the sufferings he would undergo would hasten this fatal termination. We did not hesitate; the operation was decided on, for the danger was not inevitable, whilst disorganization would produce certain death. The patient was prepared for the operation by every means likely to insure success. General bleeding was practised, in order to prevent the violence of the inflammation which usually follows the excision of hemorrhoids. A blister was applied to the arm, to prevent the danger which sometimes follows the too sudden suppression of a natural discharge. The patient was kept on low diet, and the day before the operation the intestinal canal was emptied by an aperient. A tumour, composed of seven or eight tubercles, brownish on the outside, but of a brighter colour inside, encircled externally the verge of the rectum. When the patient was lying down, without making any effort, all the tubercles were grouped, so as to form a brownish rugged tumour, about the size of a large walnut. When, on the contrary, the patient contracted the abdominal muscles, or strained as if at stool, the external tumour opened and exposed a second circular hemorrhoid, also composed of seven or eight tubercles, but of a different colour, for they were uniformly of a roseate colour, and covered in all their extent by the internal membrane of the rectum. After having pointed out these different circumstances, M. Dupuytren ordered the patient to lie down on his abdomen, and to make efforts as if at stool. This caused the protrusion of the internal hemorrhoids, which were seized with a dissecting forceps, and each of the tubercles that composed it were excised. The same was done with the external tumour, and immediately after a cautery, heated to a white heat, was applied to the bleeding parts of the wound; some hours after a small wick was introduced into the anus, and afterwards a cerate. He could retain them but a very short time. During the day he complained of transient colic pains, (diet, diluting drink, &c.) The next day the colic pains were more violent and more prolonged, the verge of the anus was tumefied and painful, the patient felt difficulty in voiding urine, feverish symptoms, (bled in the arm, diluting drink, &c.) The third, fourth, fifth, and sixth days after the

operation, the pains decreased, the urine was freely evacuated, and the feverish symptoms disappeared; the appetite returned, and he was allowed some aliments. The seventh day, as the patient had not been at stool from the day of the operation, an ounce of castor oil was administered to him, and some hours after the bowels were opened five or six stools occurred during the day; they were all accompanied by great pain at the anus, nevertheless, after each of them, the patient felt considerable relief. The following day he went freely and naturally to stool, the colic pains became less and less frequent, but the twelfth day they returned with violence, and were followed by diarrhœa, the cause of which was unknown, (mucilaginous drinks, &c.) The next day he was in the same state, (treacle one ounce.) The fourteenth day the diarrhœa ceased, and with it the colic pains, (rice gruel.) On the fifteenth day the patient was quite well. He was allowed a moderate portion of food, he was radically cured of the hemorrhoids, and the anus remained free in whatever posture he placed himself; defecation caused no pain, and he quitted the hospital completely cured.

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## SELECTIONS

FROM THE

LECTURES

OF

SIR GEORGE L. TUTHILL.

(Continued from page 165.)

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### APOPLEXIA HYDROCEPHALICA, OR WATER IN THE HEAD.

THIS disease arises slowly, and affects infants and children only. It comes on with lassitude, fever, and headache, pulse slow, pupils of the eye dilated, and sopor supervenes; these go on until the apoplectic state is fully established. This disease is named by some as acute hydrocephalus, and is very common and fatal, generally occurring between the time of teething and the third or fourth year, although sometimes it appears later. It is very insidious and slow in its progress, and the first symptoms are irritability, languor, and drowsiness, want of appetite and chilliness, skin dry and hot towards the evening, and the pulse accelerated. These may continue for a day or two; there will be then thirst and pain in the forehead, and on the top of the head; and if the infant be unable to speak, it will carry its hand to the top of its head, thereby evincing pain, and it screams suddenly; the breathing will be interrupted by sighing; there will be indifference to all surrounding objects. On the

next night the sleep will be either quiet, or the child will start in his sleep, and awake bewildered. The pain and fever will return in the course of the next day with nausea, vomiting, and a small pulse. In the evening there will be an increase of all these symptoms; the eyes will look wild, the bowels will be confined; there will be increased pain in the head; the urine will be scanty and high-coloured, with violent pulsation in the carotid and temporal arteries; the external senses will be very acute; the pupil will contract if taken to the light; the child will start, and convulsions will come on. These symptoms denote inflammation, and generally last for some days. The sudden awakening from perfect sleep, and the screaming of the little patient, are the effects of considerable pain, and are a constant precursor of the symptoms of apoplexy. After the screaming the child drops into a comatose state, and on awakening the pupil is found dilated, the sight is weakened, and the senses blunted. During the comatose state the stupor is great, and the limbs are motionless. Strabismus comes on, and the pupils of the eye are generally drawn towards the nose; the pulse becomes slow, convulsions supervene, and death follows. Sometimes these symptoms last for several days. Then the fever is more acute; the pulse frequent and quick; the eyes bloody and stertor; hurried respiration; livid circle around the mouth; relaxed state of the sphincters; and, under these circumstances, death will speedily take place. In the early stage of this disease, it is difficult to distinguish it from other diseases to which children are liable. Irritation of the alimentary canal from worms may produce the same symptoms very nearly as those of acute hydrocephalus; but then there is no headache or contraction of the pupils, and the bowels are relaxed. Irritation from teething may also produce the same effects, but the bowels are then open, and there is no contraction of the pupils. When the second stage of acute hydrocephalus comes on, it is easy to be distinguished. During the first stage, the symptoms are those of inflammation, and during the second stage, the symptoms are those of compression.

*Prognosis.*—In this disease your prognosis is always unfavourable, and from the second stage none ever recovers. In the first stage of the disease the danger will vary with the inflammation; and in the second stage with the danger of compression. Upon examining the body after death, an accumulation of water is found collected in the ventricles of the brain, varying in quantity. When this is considerable the anterior part of the fornix is raised, so that it passes on through the ventricles. The water effused in this disease is more livid than in ascites. When the quantity effused into the ventricles is large, the lateral and superior

portions of the brain are of a pulpy consistence, the head enlarges, and chronic hydrocephalus is established. After a time the skull enlarges, projecting greatly at the centre of ossification, and the membranous divisions between the bones become very wide and stretched. When after death the scalp is removed, the bones are found very thin, with membrane running across them, supposed, by Dr. Baillie, to be the remains of unossified matter; or sometimes, when during the second stage the ossification is not complete, the bones are lifted up.

*Causes.*—The causes of this disease are divided into remote and proximate, and the proximate cause is inflammation of the pia mater the lining membrane of the brain, followed by serous effusion; the remote causes are divided into predisposing and exciting; the predisposing causes are great flow of blood to the head during teething, feeding children too much upon animal food, thereby causing a morbid increase of strength, and a larger quantity of blood to flow to the head. When the cuspidati only remain to be formed, the blood not being occupied in the formation of the teeth, a large quantity of it flows to the head. Hereditary predisposition to it exists in children of parents of a scrofulous diathesis: those children who are disposed to it hereditarily are generally of a fine fair skin, large and full head and forehead, joints large, &c.; debility may also predispose to it. The exciting causes of this disease are the same as those of phrenitis, difficult dentition, certain positions of the body, as holding the child down, and also the abuse of opiates by nurses, will predispose to this disease.

*Treatment.*—As the proximate cause of this disease is inflammation terminating in serous effusion, our great object must be the removal of inflammation and the prevention of effusion and compression. The first stage is the only one in which we can hope to succeed with our remedies, and here we must employ general and local bleeding, in order to overcome the inflammation, conjoined with blisters and purgatives. If the child be two years old, you may begin by taking ℥vj. of blood from the jugular vein and temporal artery, and as in this disease the bowels are usually costive, the common purgative doses will not suffice.

If the child be two years old, he will require gr. vj. of calomel, and ℥ss. of the common black draught every hour until it operates freely. The diet should consist of barley water only. Cloths wetted with a cold solution may be applied to the head, and a blister to the outside of each leg, and warmth to the extremities; the bowels to be kept open by calomel and saline purgatives. Sometimes when the blood is taken suddenly, and the bowels are rapidly opened, the inflammation subsides, and the patient recovers. If you cannot get the purgatives to act upon the bowels, great danger will always be present,

and if you trust to purgatives only without bleeding, you will never cure your patient. If you are called to the patient early, and the disease is slight, purgatives alone may suffice. After the screaming of the child, and the apoplectic fit have come on, you must employ remedies to take up the effused fluid, and reduce the turgidity of the vessels; ℥ij. of blood may be taken from the jugular vein, and gr. j. of calomel every three or four hours, the action of the bowels must be kept up, and the absorbent system also, in order to take up the serum. If the child be two years old, ℥j. of unguent hydrarg. fortius. may be rubbed on the back and thighs every two hours. In chronic cases, sometimes the mouth will never be affected by the mercury. Squills may be added to the calomel as a diuretic, in order to promote the secretion of urine, and a saturated solution of supertartrate of potash may be drunk as in the other species of apoplexy. If the brain gradually adapts itself to the pressure and chronic disease comes on, the child may live for months and years, but he can never recover, unless by paracentesis cranii. Some have lauded digitalis and oxymuriate of mercury, and if you employ these, you must carefully watch their effects.

*Apoplexia Atrabiliaria.—Atrabilious Apoplexy.*

This disease occurs in those of a melancholic temperament. It is true that congestion of blood in the liver may produce such changes as will bring on atrabilious apoplexy, affecting the head, and producing a dejection of the spirits—yet it is doubtful whether we ought to admit this disease as one of apoplexy. It is a species of apoplexy supervening upon a bilious temperament.

*Apoplexia Traumatica.—Traumatic Apoplexy.*

This species of apoplexy arises from violence done to the head, and is a common case of compression. When a blow is received on the head, that part of the bone on which it falls is broken, and presses upon the brain, causing compression, and suspending the nervous energy, whilst the action of the heart and arteries remains. If the bone be, or be not fractured, a blood vessel may be ruptured, and the effused blood press upon the brain. The fracture of the bone, and the rupture of the blood vessel, may both be present in one case. When called to the patient, the cranium should be examined, and if a portion of bone be depressed, the head should be trepanned, and the elevator applied, in order to raise the depressed portion of bone. If after trepanning the patient is not better, extravasation will, in all probability, have taken place, and the patient will not recover.

*Apoplexia Venenata.—Apoplexy from Sedatives.*

This species of apoplexy arises from the action of powerful sedatives, either internally taken or externally applied. A state very similar to apoplexy may be produced by opium and powerful sedatives, when convulsions and stupor supervene, and the patient dies. Objections have been raised to the term given to this species of apoplexy, as it does not arise from compression within the brain.

*Apoplexia Mentalis.*

This species arises from affection of the mind, by which sometimes true compression may be produced by rupture of some blood vessel, or by serous effusion. In this species of apoplexy, Dr. Cullen does not mean apoplexy produced by compression, but suspension of the functions of the brain produced by an affection of the mind.

*Apoplexia Cataleptica.*

If this species, the muscles of the body contract only when aided by external force, and the patient has no power over the voluntary muscles of the body. If the patient be put into any position, he will remain fixed in that position, until moved from it by external force. There is a real state of body resembling this, arising from the suspension of nervous energy, independent of mechanical compression, or produced by mechanical compression. After an attack of phrenitis has lasted for some days or weeks, and the patient has yet recovered, the second stage of the disease may have produced serous effusion, sufficient to suspend the finer operations of the brain; and the patient may remain in a degree of stupor, and lose all power over the voluntary muscles, and over the understanding, and is insensible to the wants of nature, and remains either sitting or standing, in the posture in which he was placed, and is insensible to any thing passing around him. If this disease occurs after phrenitis, it may arise from nervous debility, independent of mechanical causes or compression.

*Apoplexia Suffocata.*

This species of apoplexy arises from some external suffocating cause, and this is the apoplexy of the hanged or drowned.

A person who is either hanged or drowned, does not die from apoplexy or compression of the brain, but from interruption to the action of the lungs, and therefore this disease is not, properly speaking, apoplexy.

THE  
ANATOMICAL EXERCITATIONS  
OF  
WILLIAM HARVEY, M.D.

(Continued from page 197.)

CHAP. XV.

*That the circulation of the Blood is confirmed by probable reasons.*

BUT it will not be foreign to our purpose to add, that according to some common reasons it is convenient and necessary. First, (as according to Aristotle *de Respirat. et lib. 2, ac. 3*, on the Parts of Animals, and elsewhere,) seeing that death, or corruption, happens by reason of the defect of heat (and all living things are hot, and dead are cold), there must necessarily be some place and origin of heat, as if a fire and hearth, by which the nursery of nature, and the commencement of innate fire may be contained and preserved; from which heat and life may flow, as if from their origin, into all parts from which aliment may come; and, finally, on which all concoction, and nutrition, and vegetation may depend; but that this place is the heart, and this is the principle of life, and this by that way which, I have said, I wish no one to doubt.

There is, therefore, a motion necessary to the blood, and such as that it may return again to the heart; for being distributed far from its source into the external parts of the body (as Aristotle attests, 2 part. *de Anim*); immoveable, it would coagulate, as it does when destitute of spirits, as in the dead, by the cold of the extreme parts. For we see that by motion, heat and spirit are engendered and preserved, that they disappear by rest, wherefore, lest this should happen to the blood, it is necessary, that it always by returning from its origin and fountain should renew, and both heat, spirits, and entirely its own constitution.

We see that by the exterior cold the extremities sometimes become chilled; the nose, hands, and cheeks, appear livid, resembling those of the dead, because blood in them is black, wont to flow, (as it does also and is accustomed to be directed in the dependant parts of the dead body.) The limbs are so numbed or torpid, and hardly moveable, that they seem to have almost lost life. They could certainly by no means (especially so soon) regain their colour, and heat, and life, unless they were, by a new origin, afflux, and appulsion of heat, again cherished. For how can they attract in those in whom life and heat are almost extinct; or in those that have their passages condensed and impacted with congealed blood, how could they receive the coming

nourishment and blood, unless they did dismiss that which they before contained, and unless the heart was really that beginning from whence heat and life (as Arist. *lib. de Respirat. cap. 2*, says), and from whence new blood being passed through the arteries, and warm and imbued with spirit, that which is enfeebled and chilled might be driven out, and all the parts might repair their languishing heat and vital nourishment, almost extinct?

Hence it is, the heart being untouched, life may be restored to all the other parts, and health recovered. But the heart being refrigerated, or affected with serious disease, the whole animal must necessarily suffer, and finally putrify, because when the beginning is unhealthy and suffers, (as Arist. 3. *de part. Anim.*) says, there is nothing which can afford it aid as those things which do depend upon it.

And hence, probably, the reason may be sought, why in those that are attacked with a consumption, or attenuation, from love, grief, cares, and the like, or cacochymia, or abundance of crudities, which may cause all diseases, and destroy men. For every passion of the mind which perplexes the human spirits, as grief, joy, hope, or anxiety, and approaching the heart, there making it to change from its natural constitution, by distemperature, pulsation, and the rest. If it iniquitates the nourishment and first debilitates the constitution, which is the fact, and there ought to appear less wonder that it afterwards produces various genera of incurable diseases, in the limbs, and in the body; when in that case the whole body, the aliment being vitiated, labours under the want of natural heat.

Besides all this, as all creatures live by nourishment inwardly concocted, it is necessary that the concoction and distribution be perfect, and for that cause the place and receptacle exist where the nourishment is perfected, and from whence it is supplied to every limb. But this place is the heart, since it alone, of all the parts (though for its own use it has the coronal vein and artery,) contains in its concavities, as in cisterns, or a reservoir; for instance, auricles or ventricles, blood for the use of the whole body, but the rest of the parts have it only in vessels for their own private use.

Moreover, the heart only is so placed and appointed, that by its pulsation it may equally distribute and disperse (and that according to measure and the concavities of the arteries, which are to supply every part,) to those which stand in need, and distribute it after this manner, as out of a treasure and fountain.

Moreover, in this distribution and motion of the blood there is need of violence and an impulse, or such as the heart enjoys. Also add to this, that the blood does easily concentrate and join of its own accord, to its

beginning (as a part to the whole, or as a drop of water spilt upon the table, to the whole mass), as it does very swiftly, from slight causes, such as fear, cold, horror, and the like. It is pressed out of the capillary veins into the smaller branches, and thence into the larger, by the motion of the limbs and muscles. Likewise the blood is apter to move from the circumference to the centre, than otherwise, though the valves did not hinder. Whence it follows, that if it leaves its origin or course, and moves against its will, and enters into places narrower and colder, that it requires violence and an impulsion, such as that of the heart, as I have already mentioned in a preceding paragraph. Then the blood has need of violence and impulsion, such as the heart alone, as has been already said, possesses.

## CHAPTER XVI.

*The circulation of the Blood is proved from consequences.*

Moreover there are some problems, which, from this supposed truth, appear as consequences, and are not useless to excite a belief as if *a posteriori*; and these, though they seem involved in much ambiguity and obscurity, yet they readily suffer both reason and causes to be assigned.

Why do we see that in contagion, in poisoned wounds, in the bites of serpents and mad dogs, in lues veneren, and such like diseases, the part being injured, it happens that the whole body is vitiated. Thus a lues, the genitals being injured, is wont to shew itself first of all by pain in the head or scapulæ, or other symptoms; and a wound being made by the bite of a rabid dog, and this being cured, we know that fever and the other horrid symptoms supervene. Is it because the contagion impressed on the part is carried with the returning blood to the heart, and thence returning, it iniquitates the whole body? Hence it is evident, that a paroxysm will be established. In the beginning of a tertian fever the morbid cause seeking the heart, is delayed about this organ and the lungs, and causes difficulty of respiration, sighing, and lassitude, because the vital origin is oppressed, and the blood forced into the lungs is thickened, and cannot return; and this I can state from dissection of those who have died in the accession. Hence the pulsations are generally frequent and small, and sometimes inordinate; but the heat being increased, the matter attenuated, the passages being open, the whole body begins to grow warm, the pulsations are rendered greater and more vehement, and a febrile paroxysm is established; to wit, when the preternatural heat arises in the heart, it is thence diffused through the arteries into the whole body, together with the morbid matter, which in this manner is overcome and dissolved by nature.

Why also do remedies, applied externally, exert their powers internally, as if they had been taken inwardly? For it is evident that colocynth and aloes loosen the bowels; cantharides promote urine; garlic, applied to the soles of the feet, increases expectoration; cordials strengthen; and a great variety of other medicines act in this manner. Because the veins, by their orifices, absorb some part of those things applied externally, carry it internally with the blood, in the same way that they take up chyle in the mesentery from the intestines, and convey it with the blood to the liver. It is not, perhaps, irrational to say this. For the blood in the mesentery passes through the cæliac arteries into the superior and inferior mesenteric, and proceeds to the intestines, from which, with the chyle attracted by the veins, returns by the numerous ramifications of these vessels into the porta of the liver, and through it into the cava. Thus it happens, that this blood is imbued in these veins with colour and that consistence, which is in the rest contrary to what many believe. Nor is it necessary to esteem it improbable, that the two contrary motions in the capillaries, namely, that of the chyle upwards, and that of the blood downwards, can be inconveniently effected. But is not this accomplished by the consummate providence of nature? But if crude chyle were mixed in equal proportions with concocted blood, no concoction, transmutation, or sanguification could arise; but as they are active and passive, from the union of both, a mixture or third substance is formed, as in the perfusion of wine with water and oxycrate. But when a small portion of chyle is mixed with a great quantity of blood, the latter preserves its nature, which more clearly appears, as Aristotle says, if you add one drop of water to a hog'shead of wine; or, on the contrary, the whole is not mixed, but is either wine or water.

In the mesenteric veins, when dissected, there is not found a chyme nor a chyle separated from the blood, but the same blood in colour and consistence as in the other veins appears to our senses; in which blood, because, nevertheless, there is chyle incocted and insensible, nature has placed the liver, in whose meanders it is delayed and receives a fuller transmutation, lest coming crude to the heart it obstructs the origin of life.

Hence in the embryo there is almost no use of the liver, as the umbilical vein passes through it, and a foramen or an anastomosis is formed by it with the porta, so that the blood returning from the intestines of the fœtus, passing not through the liver, but the above mentioned umbilical vein, goes to the heart, together with the maternal blood returning from the placenta of the womb. Hence also in the first formation of the fœtus the liver is formed last. We have observed in the human fœtus, all the members perfectly



delineated, even the genitals distinct, but the rudiments of the liver scarcely placed. And truly all the members and heart appear at first white, and besides nothing of red is contained in the veins, you will observe nothing but a rude mass in place of the liver, as if a collection of extravasated blood, which you would consider a contusion or a ruptured vein.

There are found in the egg two umbilical vessels, one passing from the white through the whole liver, and going directly to the heart, the other from the yolk, and terminating in the vena porta; for a chick is first formed and nourished by the white, and after its perfection and exclusion by the yolk; for the yolk is found contained in the belly of the chick after many days incubation, and it answers for the nutriment of milk of other animals, but we shall speak of these things more conveniently in our observations on problems of this kind, on the time of formation and precedence of members, why one is formed and perfected before another, of the principality of members, the cause of this. Also we shall speak of the heart, as why, according to Aristotle, (lib. 3, de Part Animal) it is first formed, and appears to have in itself life, motion, and sense, before any other part is perfected. And likewise of the blood, why before all things, and how it has in it the origin of life and heat, and why it requires to be moved and impelled here and there, and is it on this account the heart seems to be needed. In the same way in the speculation of the pulses, why some are lethal, others salutary, what are the genera and their causes, and what do these indicate and presage; likewise in the crises and expurgations of nature; in nutrition, especially in the distribution of nutriment, and likewise in all the fluxes: finally, in every part of medicine, physiological, pathological, semeiotic, and therapeutic; when I consider with myself how many questions may be determined from this truth and light, how many doubts may be solved, how many obscure things made clear, I find a most extensive field of inquiry, where I might run out so far, and enlarge so widely, that it would not only swell into a large volume, which is not my intention, but to me perhaps, life itself might be insufficient to accomplish it.

Therefore I shall endeavour to refer those things to their proper uses and causes, which are comprehended in the anatomy of the heart and arteries. For there are found many things which receive light from this truth, and render it more clear, which I wish to confirm by anatomical arguments in preference to all other things. There is one thing which ought to have a place in our observations on the use of the spleen; nevertheless it will not be irrelevant to notice it in this place.

From the superior part of the splenic branch, passing off at the pancreas, arise the

posterior gastric and gastrico-epiploic veins, all of which, with many sulci and ramifications, are disseminated into the ventricle, as the mesenteric in the intestines: in the same manner from the inferior part of the same splenic branch towards the colon and rectum, the hemorrhoidal vein is deduced. The blood regressing through these veins both ways, and carrying with it a crude juice, the chylification being incomplete, hence from the ventricle aqueous and thin, and thence crude and terrestrial as if received from the fœces; by the mixture of these contraries in the splenic branch it is conveniently tempered, and nature mixing both juices, of more difficult concoction, on account of their contrary indispositions with a copious supply of warm blood, which by reason of the many arteries, flows profusely from the spleen, it leads them, being now prepared, to the porta of the liver, so that it abundantly supplies and recompenses the defect of both, by such a fabric of the veins.

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## SELECTIONS

FROM A

### LECTURE

DELIVERED IN KING'S COLLEGE, LONDON,

(Introductory to the Second Course.)

BY

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BOTANY is a grand division of natural knowledge, distinguished as a separate science: it consists of three subordinate departments, all of them intimately allied with each other, and closely connected with the correlative general sciences, of which indeed, under another view, they severally form parts. Thus philosophic botany, or the true science of plants, consists not merely either of an account of their structure and their functions, or in a detail of their names, their characters, and their arrangement, or in a history of their habitudes and uses, but comprises all; and hence the three great subdivisions of the science into organic botany, or vegetable physics; systematic botany, or vegetable diagnosis; and economic botany, or vegetable utilities; and these several topics, each in itself important, but too often disconnectedly pursued, lose much by disunion both of interest and value: this should never be forgotten by those who wish to study philosophically the principles, the relations, and the purposes of botany.

As the most notorious of the external attributes of plants, I select their size and figure

for in both the difference is extreme. With respect to size, we have plants on the one hand almost, and others altogether, invisible to the naked eye, and not improbably some that even elude the vigilance of the doublet lens; while, as contrasts to these infinitesimals of vitality, we have palms, and pines, and oaks, from one to two and three, or even, as some report, four hundred feet in height, and of proportionable thickness. "Miracula fugiunt" often forms a comment to the relation of marvels such as these, and true enough it is that wonders, like the visible horizon, do frequently recede as we journey towards them, and often evade our practical researches; but of the above the evidences are within our reach, and in fact are always before us.

A knowledge of the internal structure of the vegetable body assists greatly in explaining the modifications of its external form; but not only this, they reciprocally become indexes to each other, as certain internal structures only, can assume certain external configurations; at least, we so conclude from the circumstance of their always being found in combination.

From the positive characters discovered by an investigation of the external and internal structure of plants, are deduced the comparative or diagnostic signs which enable the systematic botanist to distinguish plants from each other, and give rise to the second department of our science.

The functions of plants are either special, as relating to their own well-being, or general, as having an equally extensive importance to other co-ordinate existences. Thus, the absorption of nutritious fluid by the roots, its ascent through the stem to the leaves, its circulation and assimilation to the substance of the vegetable, although perhaps not wholly designed to benefit the individual alone, are chiefly and primarily so: while the transpiration of plants, and their action on atmospheric air, are functions of equal, if not greater importance to animals, than they are to the plants themselves.

The respiration of plants seems to have been generally misunderstood from this function having been confounded with their digestion, both being parts, in fact, of one great process, that of assimilation; although respiration would seem to perform some other important duty, perhaps in maintaining the irritability of the vegetable. Plants always deteriorate atmospheric air by their respiration, but by their digestion they much more than compensate for this deterioration; and, on the whole, they tend to preserve the equilibrium which combustion and the respiration of animals have a tendency to disturb.

Of the light which modern chemistry has thrown on some intricate parts of botany, I cannot speak in too grateful terms, however warm my acknowledgments may seem; for by its means we are enabled to explain many physiological phenomena which, with-

out its aid, were utterly inexplicable: e. g. it has been a constant theme of wonder (and remember that it is not the less a miracle now that we can trace back one further link in the chain of events, for physical causes are but effects; it has been, I repeat, a constant theme of wonder) that from the same soil plants should elaborate such different principles; that, fed, sustained, supported by the same earth, air, and water, one should produce starch, another gum, a third sugar, and so on; that some should abound with bland, others with highly aromatic essential oils, such as the olive, the almond, cinnamon, cajeput, and so on. That here we should find the most useful medicines, and there the most deadly poisons; as, for example, bark, opium, and rhubarb, contrasted with prussic acid, the *upas tieuté*, and *woorara*.

But not only is it strange that by different plants such different products should be formed from the same materials, or that the same plant, in its different parts, should elaborate many of these varieties; as, for example, a tasteless, harmless oil in the kernel of the bitter almond, and a destructive poison in its outer skin, and so forth, as in the *cassava*, poppy, and many other similar cases; but it is passing strange that the same parts of the same plant should be at different times so very different in their sensible qualities; at one time consisting almost wholly of insipid lignin, at another being as sour as *verjuice*, and anon abounding with sugar, impregnated with some delicious aroma.

The stings of the nettle are almost curiously constructed: each stimulus being a hollow stilet, something like the fang of a rattlesnake, the channel through which communicates with a reservoir, into which a gland at its base, pours an acrid fluid, which, when any thing touches the leaf, is compressed, and the fluid, rising through the duct, escapes through an opening at the side of the style near its point, and thus is lodged in the puncture the instrument has made. The *Valisneria*, the *Cyclamen* the *Utricularia*, and a variety of other plants, exhibit mechanical contrivances equally beautiful, and equally well adapted to fulfil the purposes for which they were evidently designed.

Botanical geography, the next point of consideration, is a topic replete with interest; for here we learn how much plants affect and are affected by climate, both physical and geographical, and how they vary according to latitude, longitude, and altitude; for different countries, even in the same or similar parallels, often have vegetations of entirely different characters.

This is a study of such recent date, that the present generation may almost esteem it a science of their own. To the naturalist the truths thus learned are very valuable; and to the medical philosopher it is a study peculiarly important, as the presence or absence of certain plants will often reveal to the eye

of science the healthiness or insalubrity of untried or suspected districts; and hence botanical topography not unfrequently becomes one of the surest guides to the local presence or absence of various diseases.

Thus, the colonist should never bivouac nor fix his residence where the *Arundo Phragmites* flourishes; as it and the *Glyceria fluitans* and *G. aquatica* are infallible indications of swampy, marshy districts, and of the probable presence of malaria, even although the tract, as in summer, may seem dry, and be apparently salubrious. A late traveller in Syria thus was warned by the natives not to pitch his tent on the spot that he had selected on account of the luxuriance of the herbage, if he valued his life, or wished to escape a severe attack of fever; this malign influence, however, they seemed erroneously to attribute to the growth of the plants, but of which, in truth, the luxuriant herbage was the index only. Thus also was the indigenous origin of remittents proved in Gibraltar; and thus the absence of the *Laurustinus* from the gardens of Switzerland shews the severity of the winter there, as the luxuriance of the vintage proves the warmth of the Swiss summer. Again, the barrenness of the apricots and the vines, while the myrtles and the camellias flourish in the open air, will attest the equality of the temperature in Devonshire and Cornwall throughout the year; the heat of the summer being as insufficient to perfect those, as the mildness of the winter is favourable to these: but of examples there would be no end.

Botanical Topography, which treats of the station as well as the habitation of vegetables, includes much knowledge of extreme importance; and even the more special topography of parasitic plants is not wholly destitute of interest or of value; e. g. many of our lichens, fungi, &c. will grow only on certain plants and trees, or often on only especial parts of them, just as many insects inhabit only one genus or species, or only particular parts of the selected habitat: on the oak there are four or five different sorts of galls formed on different parts by different insects, one on the bud, one on the branch, one on the root, one on the leaf-stalk, one on the flower-stalk, one on the leaf itself, &c.: and we are even told that the gall of the upper side of the oak-leaf is the work of a different species of cynips from that which makes the gall upon the under. However that may be, whether the variety is quite so great or not, I do not by experience know; but this I can from observation state, that there are several, probably four or five different galls, apparently produced by different insects. Now, this is not true of the oak only, or of insects alone, the same thing is observable with regard to the parasitic protophytes; and a German botanist has pointed out a very useful application of this knowledge to aid in the discrimination of the true *Cinchona* from the

spurious barks which in commerce are, either from accident or fraud, frequently commingled with it; for he has shown that one species of lichen is peculiar to and only found on the true official *Cinchona*, while the false barks with which it is adulterated, although often covered with other lichens, never bear any of this diagnostic species. Again, I recollect reading that, some years since, in America, a mortal distemper raged with much severity among the people, and was found to be owing to their feeding upon the *Zea mays*, or Indian corn, as those who did not eat this bread escaped: but why a grain, in general fit for food, should that season have proved so injurious, no one could tell, until a botanist, on looking at the subject by the light of science, found that on each grain of corn, just where it had been torn from the ear, a small poisonous fungus grew, to which the fatal influence had all been owing; just as the deleterious effects of cheese are often attributable to a similar plant. But how was the fungus to be prevented from growing? How was the farmer or the miller to avoid the pest, although its source had been detected? They knew not; they were as impotent as before. But the head of him whose eye discovered the bane revealed the antidote; for, as it was found that this fungus only grew on the parts where the grains had been attached to the stalks of the ears, nothing was more easy than to leave the corn unthreshed until it was wanted to be ground into flour. This accordingly was done, and so the plague was stayed; and, in consequence of such a simple application of science to the common purposes of life, large quantities of food were redeemed from destruction, and much human misery providentially averted.

One more illustration, and I have done. The lichens, or aerial algæ, never grow submerged; the fuci, or aquatic algæ, never grow emerged: the same may be said of other plants which are the living demarcations of land and sea; e. g. the samphire (*Crithmum maritimum*) never grows but on the sea shore, and yet it never grows within reach of the waves; that is to say, it is never so near as to be covered by the water. It happened not long since that a knowledge of this fact was useful in a way and at a time when botanic knowledge might *a priori* have been expected to be of little practical importance. During a violent storm, in November 1821, a vessel, passing through the English Channel, was driven on shore near Beachey Head, and the whole crew being washed over-board, four escaped from the wreck, only to be delivered, as they thought, to a more lingering and fearful, from its being a more gradual and equally inevitable death; for having, in the darkness of the night, been cast upon the breakers, they found, when they had climbed upon these low rocks, that the waves were rapidly en-

croaching, and they doubted not that, when the tide should be at its height, the whole range would be entirely submerged. The darkness of the night prevented any thing being seen beyond the spot upon which they stood, and which was continually decreasing by the successive encroachments of each successive wave. The violence of the storm left no hope that their feeble voices, even if raised to the uttermost, could be heard on shore; and they knew that, amidst the howling of the blast, they could reach no other ear than that of God. Man could afford them no assistance in such a situation, even if their distress were known. The circle of their existence here seemed gradually lessening before their eyes, their little span of earth gradually contracting to their destruction; already they had receded to the highest points, and already the infuriated waters followed them, flinging over their devoted heads the foremost waves, as heralds of their speedily approaching dissolution. At this moment one of these wretched men,—while they were debating whether they should not in this extremity throw themselves upon the mercy of the waves, hoping to be cast upon some higher ground, as, even if they failed to reach it, a sudden would be better than a lingering death,—in this extremity, one of these despairing creatures, to hold himself more firmly to the rock, grasped a weed, which, even wet as it was, he well knew, as the lightning's sudden flash afforded a momentary glare, was not a fucus, but a root of samphire: samphire is a plant which never grows submerged. This then became more than an olive branch of peace, a messenger of mercy; they knew that He who alone can calm the raging of the seas, at whose voice the winds and the waves are still, had placed his landmark, had planted his standard here; and by this sign they were assured that He had said to the wild waste of waters, Hither shalt thou come, and no further. Trusting, then, to the promise of this child of earth, they remained stationary during a dreadful yet then comparatively happy night, and in the morning they were seen from the cliffs above, and conveyed in safety to the shore.

[We regret that want of space prevents us from continuing our extracts from this classic and scientific lecture. We have given enough to convince our readers of the ability of the learned Professor.—EDS.]

## Reviews.

*The Effects of Arts, Trades, and Professions, and of civic states and habits of living, on Health and Longevity; with suggestions for the removal of many of the agents which produce disease, and shorten the duration of life.* By C. TURNER THACKRAH, Esq. Second Edition, greatly enlarged. London: Longman and Co. Leeds: Baines and Newcome. 1832. pp. 238.

(Continued from p. 114.)

WE come next to the second great class, dealers; these are shop-keepers, inn-keepers, and commercial travellers. The first and third having been noticed in the first edition, we shall now merely allude to the inn-keeper. He is generally intemperate and unhealthy. "Often bulky and plethoric;" he has that appearance which ignorant persons mistake for health, but which is known to the medical eye as the foundation of disease. Sometimes gastric disorder introduces serious affections of the brain, but more frequently abdominal congestion, with diseases of the liver and stomach, are first established, and apoplexy or dropsy closes the scene.

We proceed next to the class of merchants and master manufacturers, in the fourth class are included men who are independent of business and labour, and bon vivants. Professional men, and persons engaged in literature, form the last class. On these different sections a deal of highly interesting and valuable matter is contained.

Practitioners of medicine and surgery stand third on the list of professional men in the fifth section, and already mentioned in the first edition. We cannot avoid extracting the part relating to them, influenced, as we must confess we are, by that feeling of selfishness which is inherent in the human race.

“ Practitioners in medicine and surgery must next be noticed. Our office requires that a considerable portion of time be daily devoted to study, and the rest to professional visits. These, of course, afford exercise in the open air, and thus tend to invigorate health; while, on the contrary, the application of mind to study and research, serves to impair it. Night calls are generally thought to be very injurious. I think the evil less than the public and the profession suppose; for, if we observe those who have for thirty or forty years been much engaged as accoucheurs, we shall find them as robust as others. Anxiety of mind does more, I conceive, to impair health than want of sleep, nocturnal exposure, or irregularity in meals. The body suffers from the mind. That sense of responsibility, which every conscientious practitioner must feel, the anxious zeal, which makes him throw his mind and feelings, into cases of especial danger or difficulty,—break down the frame, change the face of hilarity to that of seriousness and care, and bring on premature age. Patisier aptly quotes the adage, ‘*aliis inserviundo consumantur, aliis medendo moriuntur.*’ Indigestion is general among medical men, and diseases of the lungs and blood-vessels are frequent. Surgeons and accoucheurs, moreover, are liable, in the discharge of their professional duties, to the absorption of syphilitic poison, and a consequent train of distressing, and sometimes fatal effects. Does the profession, as a body, attain the full duration of life? I am not acquainted with any satisfactory statements on the subject. Instances, however, of considerable age will be immediately remembered; but while referring to such cases, we forget the number who die in middle age and youth. Inquiring occasionally after those whom I knew as students, I have been often surprised at the number of deaths. Pupils sent to distant medical schools at the end of their apprenticeship, and thus placed suddenly in a scene

of dissipation, without governor or adviser, mixing, too, with a large mass of young men similarly situated, suffer from the evils and disease which irregularity produces. While the steady youths, attending the hospitals, dissecting, hearing various lectures, and preparing for examination, often also obliged to acquire, in a couple of winters, that various knowledge, to which triple the time ought to be devoted, are severely injured by the great application of mind. Hence, the students who come out of the lecture-room at the end of the session, we should recognize as the healthy young men who entered it a few months before. Complaints of the stomach and bowels are common, and pulmonary consumptions by no means unfrequent. The effects of wounds in dissection are well known to be very serious, and often fatal. A remedy might be provided for most of the evils to which the medical student is exposed. Scientific education might be conducted in a great measure in the country, and under the eye of masters; and youths might obtain the knowledge necessary for the practice of their profession, more fully, more slowly, and therefore more securely.”

The remarks on schools are deserving the utmost attention. We shall conclude by quoting Mr. Thackrah's general summary or recapitulation.

“ I. In this summary we first notice the agents, which our examination leads us to believe are *comparatively harmless*.

1. The chief are *wet, vapour, and changes in the humidity of the local atmosphere*. In pages 125, 133, we have adduced proof that the agents, in temperate persons, produce little injury.

2. Neither have changes of temperature a marked effect in the production of acute disorders.

3. The *exhalations from vegetable matter* we have not found injurious; but we had not the opportunity of making observations sufficiently nu-

merous and correct, to warrant a decided opinion.

4. The *natura lodours of manufactured vegetables*, with the exception of coffee, appear to be little noxious. Tobacco-workers (snuff-makers are not included) do not sensibly suffer from the fumes of their material; and the crushers of rape and mustard seem even benefited by the odours which these seeds exhale.

5. The influence of a *change in the period of sleep* is less than we should have expected. We do not find that millers, watchmen, and coachmen, are sensibly affected by night-work.

II. We next refer to certain agents or circumstances connected with our employments, which appear to be *directly or indirectly beneficial*.

1. *Animal exhalations*, even the most offensive to the senses, and generally supposed to be very prejudicial, our examination shows to be really useful. We refer to the health of glue-makers, buckram-stiffeners, tanners, slaughter-men, tallow-chandlers, carriers, leather-dressers, grooms, &c.

2. *Oil or grease applied to the skin*, appears to have a beneficial effect. We refer to several branches of the woollen manufacture, as stubbing, carding, and the children's employment of 'piecening.'

III. We last recapitulate the agents, which our examination leads us to believe are *decidedly injurious*. These, varying in the organs or systems they affect, require us to attempt an accordant arrangement.

1. AGENTS INJURIOUS TO THE DIGESTIVE ORGANS.

*a Excess of food*, absolute or relative, in butchers, gentlemens' servants, gourmands, many professional and literary men.

Result.—Plethora.

*β Defect of proper food*, in men on the roads, cart-drivers, labourers in husbandry (at the present time), weavers, wool-combers, and other persons employed in manufactures, when trade is reduced; children at school.

Results.—Certain painful affections of the stomach; reduction of strength and flesh; change, I believe, in the state of the blood.

*γ Bent sitting posture*, in tailors, shoe-makers, watch-makers, milliners, weavers, saddlers, cork-cutters, &c.; in all persons engaged in reading and writing.

Results.—Defect in the blood and general circulation; congestion, especially of the system of the vena portæ; functional disorder of the liver; indigestion; diarrhœa, and other diseases of the mucous membrane, of the intestines, piles, fistula in ano.

\* \* \* \* \*

*δ Long standing*, in the bulk of active employments.

Result.—By keeping the stomach pensile, it has been thought to affect digestion.

*ε Pressure of the chest on the stomach*, in weavers.

Result.—Painful affections of this organ.

*ζ Great muscular efforts*, in lifting weights, &c. in porters, millers, &c.

Result.—Hernia.

*η Steam*, in brushers of cloth.

Result.—Bowel complaints, indigestion.

If such be the common effects, how are they produced?

*θ High temperature*, in bakers, cloth-pressers, glass-men, and in all operations mentioned at pages 128, et seq.

Result.—Impaired appetite.

*ι Common atmospheric impurity*, affecting of course, all townsmen, but especially shopkeepers, artisans, and those working late at night, and who burn oil for light.

Result.—Impaired digestion.

*λ Dust and gaseous impurity of the atmosphere*, in millers, flax-spinners, miners, workers in metal, &c.

Results.—Vomiting, loss of appetite, impaired digestion.

*μ Anxiety, and mental application*, in merchants, professional men, students, &c.

Result.—Disease of the stomach and liver.

## 2. AGENTS INJURIOUS TO THE URINARY ORGANS.

*a* *Long sitting, and delay of micturition*, in literary and scientific men, and in many artizans.

## 3. AGENTS OR STATES INJURIOUS TO THE RESPIRATORY ORGANS.

*a* *Dust*, in corn-millers, malsters, snuff-makers, flax-spinners, some dressers of cloth, rag-sorters, willyers, miners, grinders, masons, machine-makers, workers in certain kinds of wood, &c.

Results.—Inflammation of the bronchial membrane, inflammation of the pulmonary substance, consumption, asthma.

*β* *Steam*, in cloth-brushers.

Result.—Difficulty of breathing, (temporary?)

*γ* *Lifting great weights*, in warehousemen, porters, &c.

Result.—Hæmoptysis?

*δ* *Confined state of the chest*, in females from wearing tight stays.

Result.—Defect of respiration and circulation, with its effects on the whole economy.

*ε* *Confinement in a bad atmosphere, and in a posture which induces vascular congestion of the lungs and heart*, in tailors, shoe-makers, weavers, printers, &c.

Result.—Pulmonary consumption.

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## 4. AGENTS INJURIOUS TO THE CIRCULATORY SYSTEM.

*a* *Posture in hackney-coachmen, postillions, &c.*

Result.—Aneurism.

*β* *Bent sitting posture*.—See 1. *γ*.

*γ* *Long standing, with great muscular exertion*, in various operatives.

Result.—Varicose veins, particularly of the legs.

*δ* *General excitement from high temperature*.

## 5. AGENTS AFFECTING THE NERVOUS SYSTEM IN GENERAL.

*a* *Peculiar atmospheric impurity*, or the addition of noxious gases or vapour in the air respired, as the fumes of lead, to plumbers, painters, &c. fumes of zinc to brass-founders; fumes of muriatic ammonia, &c. to

tin-workers; of sulphur, to straw-bonnet-makers; sulphuretted hydrogen, &c. to gas-workers; fumes from coke; carbonic acid gas, to wool-combers, &c.

Results.—Difficulty of breathing, debility, headache, consumption, in some classes, debility in others.

*β* *Poisonous substances, which act through the medium of the skin*, as solution of lead applied to the hands and arms of potters; the types, to printers; mercury, to the makers of looking-glasses, &c.

Results.—Constipation, palsy, salivation from the action of mercury.

*γ* *High temperature of the atmosphere*, in stuff-pressers, glossers of cloth, founders, smiths, tobacco-manufacturers, bakers, men in dry-houses, cloth-singers, wool-combers, cotton-spinners, glass-workers, &c.

Result.—Debility.

*δ* *Anxiety and mental application*, to merchants, professional men, students, &c.

Results.—Disease of the brain, of the liver and stomach, of the heart.

*ε* *Cerebral congestion*, induced by that congestion of the system of the vena portæ, noticed under the agents acting on the digestive organs.

Results.—Oppressive headache, apoplexy, palsy, &c.

*ξ* *Declination of the head for long periods*, in carvers and gilders, shoe-makers, clerks, &c.

Result.—Congestion of the vessels of the head.

## 6. AGENTS INJURIOUS TO VISION.

*a* *Close application to minute objects*, in watch-makers, workers for linen repositories, milliners, burlers, engravers, literary men, &c.

Results.—Ophthalmia (slight), short-sightedness, palsy of the nerves of the eye.

*β* *Application of the eyes to scarlet colours*, as by weavers of certain articles, printers of woollen and stuff cloths, drawers, &c.

*γ* *Mechanical annoyance to the eyes*, as lime-dust to lime-burners, brick-layer's labourers, coal-dust to colliers, soot to chimney-sweeps, &c.

Result.—Inflammation of the conjunctiva.

7. AGENTS INJURIOUS TO HEARING.

a *Noise of Machinery*, as in frizers, cotton-spinners, corn-millers, &c.

8. AGENTS INJURIOUS TO THE BONES.

a *Wet* to the lower extremities of colliers, &c.

Result.—Necrosis.

9. AGENTS AFFECTING THE MUSCULAR SYSTEM.

a *Posture and great muscular exertion*, in pavers, coopers, quarry-men, &c.

Result.—Pain in the loins, &c.

10. AGENTS INJURIOUS TO THE SKIN.

a As *flour* in bakers, *sugar* in grocers, *sulphuretic acid* in hatters, *lime* in bricklayers, &c.

Result.—Cutaneous diseases."

Of this work but one opinion can be formed; it is one of the most valuable and interesting productions we have seen for a long period; every page is replete with information; we need scarcely add that it ought to be in the library of every medical man.

The author's avowed object is to be useful to his fellow-creatures, and he has fully succeeded. He has pointed out to the merchant the folly of acquiring riches at the expense of health; to the man of independence, the necessity of employment, and the baneful effects of indulging in the luxuries of the table; and to the mechanic he has shewn that health is incompatible with the intemperate use of ardent spirits, in which this class are but too apt to indulge. We recommend this work to every one who values his health and wishes for longevity, as it will point out what would be injurious to him, and what would counteract the deleterious influence to which most persons are unavoidably exposed.

REMARKS ON THE BLOOD

By C. J. B. ALDIS, A. B. M. B.

IN consequence of the great importance of the blood in the animal œconomy, we cannot be surprized, that it has at various times attracted the observation of mankind; occasionally as an object of curiosity, from which some have instituted a more minute analysis, in order to elucidate its properties. Medical men have urged these inquiries from the idea, that therapeutical knowledge might be advanced, and the necessity of resorting to venesection has given them frequent opportunities of studying its appearances.

Some chemists have attributed the redness of the blood to an admixture of saline, subacid, and sulphureous juices, others to impregnation of the air in the lungs, others grant this no further than to account for the difference of redness between the venous and arterial blood; on the supposition, that after its colour has been rendered more vivid by admixture of air in the lungs, this vivid colour is retained in the arteries, but is subsequently changed into a darker hue in the venous circulation.\* Mr. Hewson is of opinion, that air in the lungs causes the florid colour of the blood. † The investigations of Dr. Priestley demonstrate that the florid red appearance of the blood is produced by air and from experiments on atmospheric air, which he has stated to consist of earth and spirit of nitre; he imagines that a nitrous quality is conveyed to the blood in its course through the lungs. From the experiments of Sir Humphrey Davy, it seems, that a large portion of inspired oxygen and a small portion of inspired nitrogen are retained in the system, and a discharge of carbonic acid gas from the system occurs. Other celebrated chemists, who have pursued their inquiries

\* Experimental Inquiry into the Properties of the Blood.

† Experiments and Observations on Air.



on this subject, were unable to discover that any part of the inhaled nitrogen was retained. Much contradictory evidence has been brought forward respecting the question, whether the carbonic acid is formed within the vessels or without them? The blood is susceptible of changes; it is usually attended with coagulation when out of the body and dissolution, in which case, it is indisposed to separate into cruor and serum. This has been remarked to be the result of some malignant fevers, In some cases of typhus, where the tongue was glazed, dry, and brown, and the lips and cheeks of a purple hue, Dr. Armstrong has seen the blood from the temporal artery of a venous character. This state of the blood, in the arteries, appears to the same author, to be connected with the advanced stages of typhus fever, and dependent upon a specific bronchitis, where the mucous coating of the bronchia is loaded with dark blood, and tenacious secretion. The prevailing epidemic has been attributed to a darkened appearance of the blood; venous congestion has been observed in all the vessels of the brain, and the lungs have been found loaded with much dark blood. In many cases the intestines presented numerous arborescent patches of vessels, having a salmon tint, and the mucous membrane lining them exhibited a similar dye. In some the intestines were paler than natural.

#### TRANSFUSION AND INJECTION.

Among the different experiments on the blood, the operations of transfusion and injection have been hailed as means of restoring health. It has been shewn by the experiments of various physiologists, that a more powerful effect is produced by injecting medicated substances immediately into the circulation, than by exhibiting them in the usual method. Several years ago transfusion was abandoned as useless, but since M. M. Prevost and Dumas have recalled the attention of the profession to the sub-

ject, several instances of success have happened in this country. In transfusion, the blood of an animal of the same species must be employed. It was found, that if the blood of a different animal was transfused, great disorder of the functions was occasioned, and death generally ensued. The operation of injecting liquids into the blood of different animals, is said to have been first performed by Sir Christopher Wren.\* Mr. Boyle also injected infusions of opium, &c. Injecting different medicines, was formerly recommended in apoplexy, hydrophobia, and lately in cholera.† For Hales in his *Essays* has related various experiments on the blood, and blood vessels of animals, and by suitable observations inquired into the nature of the motions of the animal fluids.‡ He observed in one of his experiments that dogs constantly died when the blood grew very dilute with water. It was observable, that the dogs constantly evinced great uneasiness instantly as soon as the blood warm water entered the arteries, and mixed with the blood. This warm water usually made the dogs vomit, especially when the column of water was  $9 \times \frac{1}{2}$  feet high; hence we see that warm water in the blood has the same effect in giving a convulsive motion to the muscular fibres of the stomach as when taken inwardly, in which case it is well known to cause a nausea and vomiting; and he further states that it has a like effect upon all the muscles of the body, for when the water enters the muscles, two or three minutes after the dog is manifestly dead.

Old Burlington-street,  
Sep. 10th, 1832.

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\* Usefulness of Experimental Philosophy. Part II  
Essay 2.  
† Vol II. Papim.  
‡ Exp. XIV. Vol. II.

*The following concluding part of Dr. Hancock's paper on stimulant frictions, and on the alternate use of cold and warm water in cases of poisoning by opium, was omitted last week for want of room.*

This mode of treatment was subsequently employed in several severe and long continued fevers in children,\* depending on latent inflammations, which cases are common in the colonies; one of these being a daughter of the writer, then near five years old—a hopeless case of seventeen days standing. It was used in the most grave complaints only, being thought a severe application. Its severity however is by no means such as one would imagine, not even with patients in their senses, and no one will consider it to be so in those advanced stages of disease, when stupor and insensibility have supervened. It has been a source of deep regret with the writer, that this method was not employed on a beloved child (his eldest son) who died in 1824, of a most tedious disease, of twenty days duration, of the same type as those above noticed.

In 1827, an infant of Mrs. H. on the fourth day after its birth, was seized with lock-jaw; about twenty-five drops of laudanum, intended for divided doses, were given at once; the spasms continued still to recur however, with intervals of somnolency, for about twelve hours, and then ceased entirely; the child fell into a torpid state and a death-like sleep, gasping, the respiration, at times, ceasing for some minutes. It was shaken and rubbed occasionally, to rouse it from its lethargy, with the use of ammonia, aromatic vinegar, &c. The respiration was thus excited for some time; these means however, after an hour or two, no longer had effect; the blood stagnated in the extremities, the lips and finger-nails became blue, the pulse extinct, face and neck livid,

and the infant appeared to be totally exanimate. It was rubbed smartly with bruised capsicum, salt and lime juice, then dashed with cold water, which now produced a deep inspiration, and by repeating the friction it was kept awake for some minutes, but again relapsed into a breathless sleep: again it was resuscitated by the cold affusion, and this, alternately with the pepper frictions, and occasionally the warm bath, roused the infant from its deadly torpor, and no other means produced the smallest effect, till the lethal effects of the opium wore off, which continued however for nearly twenty-four hours from the time the dose was taken. The frictions were applied to all parts of the surface, and the water dashed over the whole body, for it was found to have no effect when partially applied, nor would either of these agents act alone, or unless used in succession, the case was so extreme: these too would have failed, but for the warm bath, which, after some hours was also found necessary to give excitability, and to restore the vital heat. During this process, our excellent neighbours and a kind physician, who was present, consoled its mother, saying, the Lord had taken the little innocent to himself, and they often intreated of me to desist in my efforts to restore the *dead* infant. I enter into these details to shew what may, with God's help, be effected in such cases by patient perseverance in a proper method, and because there are many who assert that *trismus infantum* is incurable. The effects of the remedy (the opiate) however, proved in this case, more formidable even than the tetanic disease. We therefore named the child Theodosia. In this case it was expected that the whole surface would be blistered; but owing perhaps to the torpor, a slight redness only was induced.

\* Especially on Lima, Batave, and Devonshire Castle, amongst the largest estates in South America.

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OBSERVATIONS  
ON THE  
USE OF ENEMATA IN VARIOUS  
DISEASES.

By DR. HANCOCK.

THE following observations were suggested, in part, by some remarks which appeared in a contemporary of Saturday, and which I had intended to forward to that Journal; but further on observing it noticed in a manner extremely illiberal, or at the best bombastic, the purport of which could not be mistaken, that a contemporary was often filled with papers which in that had been refused,\* and lest mine should fall amongst the *rejected addresses*, I deemed it best to offer them at once to your very valuable Journal, not being compromised or controlled by a preference for any. *At the same time I should wish to see peace and a liberal feeling manifested by all who are engaged in the cause of science.* The world is wide enough for all, and there is no occasion to compromise the dignity of the profession by inviting the satire of the vulgar, to apply to us their remark, that "two of a trade can never agree." But to the subject in point; you will pardon this episode.

In so dire a malady as at present prevails, it is most essential to guard against malpractices, that the remedies employed may not be worse than the disease. I have long considered that the excessive use of alcoholic stimuli destroys more lives than are saved by their employment, especially as the stage of reaction often proves more difficult of management than that of collapse, although this may vary at different times, and under different circumstances. I am

\* Our valued correspondent must be aware, that some journalists have no object in view but acquiring pelf; the interests of science are of no value with them.—EDS.

not alone, however, in the opinion just expressed. A very able and upright physician, a member of the Central Board of Health, who has studied the disease in Russia, and has been likewise an attentive observer here, lately expressed himself to me, that the multiplied remedies and means employed were manifestly, on the whole, attended with the most serious and injurious consequences, and that the recent exposition of the cold water treatment, which appears better verified than most others, is a satire on the healing art; and in the opinion that our remedies have been too numerous, I believe that every liberal minded physician will concur.

Many reports have been circulated lately in the public prints, of persons being immolated! or buried alive! whilst in the ultimate stage of collapse, or when stupified by oppressive quantities of alcohol or opium. It is painful to reflect, that the public have some ground on which to rest their surmises.

A very erroneous idea, it appears to me, prevails in regard to the action and power of remedies administered by *enemata*. Authors, in general, direct that when given in this way the usual dose should be doubled. Now whether this be correct with respect to simple purgatives, diuretics, &c. I am not prepared to say; but I know that narcotics act with equal force, in the same dose, whether exhibited by the mouth or by glyster. I am certain that such is the effect with regard to opium, and have every reason to believe that it obtains equally with all other soporiferous or narcotic substances.\* I have found that the effects of the elaterium of South America (*momordica operculata*), are nearly the same, whether employed by the mouth or by glyster, excepting that in the latter mode it is less apt to occasion nausea. The like I presume may be

\* Baron Dupuytren entertains a similar opinion, and advises the same dose as by the mouth in enemata.—EDS.

asserted of croton oil (one of the most nauseous of all substances taken into the stomach), and of various exciting, narcotic purgatives, as colocynth, hellebore, colchicum, tobacco, and probably most others which act in a small dose, provided in all cases that the injection be retained, as those agents which occasion emesis, are also liable to be expelled from their stimulus on the rectum, before they are taken up by the absorbent system.

I consider, that it is much to be regretted that the use of glysters is so little appreciated, and badly understood, that the methods pursued often defeat the purposes intended, and cause it to obtain bad repute, being conveyed into the intestines in such quantities, both of the remedy and vehicle, as often to cause its certain and sudden expulsion. Twelve to sixteen ounces, or much more, is not unfrequently given for a purgative, or anodyne glyster, but the quantity should not exceed six or eight ounces, if intended to have due effect. The pressure in the former case excites the rectum to contract, before the enema can affect the system. This renders the effect altogether uncertain, and hence, repeated enemata of *gruel*, with *half an ounce of tincture of opium* in each, might be given with results altogether *equivocal*; but should one of these be retained for an hour or two (and opiates are seldom expelled unless given in a very large vehicle), it would require no very extraordinary aid of the cholera to do the *patient's business for him*; and especially, were he drenched with pure brandy by the *half pint*, and wine-glassfulls every three or five minutes afterwards! Is it not rather discreditable to the medical press that such practices should have the *sanction of print*, in a journal too, which lays claim to such capabilities of selection, as that in which these exposures have recently appeared? If this work however, like all others, be occasionally obnoxious to censure,

it must be allowed to have been the promulgator of many excellent fundamental measures, and stood forth the champion of medical reform with great effect; so that we must "render unto Cæsar the tribute that is due." I consider it the imperious duty of every friend to humanity, to join in the pathetic call of the last number of the *Lancet*, for a most critical investigation of the merits of the innumerable methods announced as cures for cholera, by a government or national commission, as the only means of unveiling the truth, and tracing the lines of demarcation between useful science and empiricism. This is a measure that ought to be urged by every periodical. To what have the Herculean powers of the British press been devoted for years past, but to the all-important measure of reform? Has then the mountain so long in labour brought forth a mole? Would not the results of the present proposition, judiciously conducted, be of infinitely more real importance to mankind, than all the senseless squabbles between Whig and Tory, reformers, conservators, anti-slavery societies, and all such state quackery and humbug?

London, 10th Sept. 1832.

P. S. The quackery of *clysmaducts* and engines, for forcing vast quantities of water into the bowels, has almost supplanted the useful purposes of enemata, which are infinitely more useful and conveniently administered by means of a simple India-rubber bottle and pipe, such as to hold nearly half a pint (and which are to be obtained at a trifling cost), an article that no family should be without. This offers a resort when nothing can be retained on the stomach, or when the power of *deglutition* is *arrested*, circumstances of frequent occurrence in cholera, *vomito*, and in divers disorders; and thus may the full powers of the most nauseous medicines be availed of, when, in delicate habits, they could not be otherwise employed. But the

great error, in respect to the use of glysters, is that in general they are considered, not only as feeble auxiliaries, but rather as simple *mechanical* agents, as exerting no considerable impression on the system; and, in the common misusage, they scarcely do more than cause a momentary stimulus and distention of the lower intestine.

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#### EFFICACY OF COPIOUS LIBATIONS OF COLD WATER IN CHOLERA.

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DR. GILKREST has lately published a letter in the *Times*, in which he comments upon the sagacious advice of the Central Board, that no more than two or three tablespoonsful of cold water should be given at a time to cholera patients. There is not, perhaps, a medical man in this metropolis who has so zealously and indefatigably visited various cholera hospitals as this gentleman, nor one in whose statement more perfect confidence can be placed. We, therefore, extract his comment, which is by the bye a repetition of our own, on the sanitary circular of the Central Board, as it shews that our strictures were just.

“ But it should be known that, at certain points in this capital, the practice for some time has been, in the malignant form of the disease, when the thirst is usually very great, to suffer the patient to drink enormous quantities of cold water,—perhaps 20, 30, 40, or even more pints (according to tables kept) within 24 hours; while, in the course of many hours, considerable vomiting has been kept up by preparations, of which common salt formed the base, and to which, in some cases, a stimulant has been added; and, under this management, the recovery of patients from a most perilous state, has taken place to an extent which certainly merits the particular attention of the profession.

“ It may be admissible perhaps to state here, in order to show how far my statements may be worthy of notice, that, since writing some letters on cholera in the early part of the epidemic, and which you did me the favour to insert in your columns, I have unceasingly continued to visit those parts of the metropolis and neighbourhood where I believed most information was to be obtained on the subject of the prevailing disease. By the liberality of many gentlemen, I have been admitted freely, and at all hours, to their hospitals, and have thus become acquainted with various plans of treatment adopted. I have, indeed, been requested by some of the gentlemen who have given the water in such quantities, to watch closely the effect of their plan,—to examine minutely the patients in whose cases it was adopted, &c., and with this view, besides making visits, sometimes of long duration, throughout the day, I have gone to an hospital at a late hour at night, when it became an object to verify a particular point. My having no patients under my own charge during the epidemic, rendered me, in the eyes of those gentlemen, more likely to be free from a bias supposed to influence medical men sometimes in favour of particular plans of treatment. Under these circumstances, then, and without for a moment wishing it to be understood that I am urging anything which should supersede other steps recommended by judicious bed-side practitioners, I feel strongly impelled, by a sense of duty towards the public, to declare that, under the above treatment, I have been most agreeably surprised by the recovery of patients whose state gave, from what I had seen of the disease, but little hope of a favourable issue by the employment of any remedies. To be as in duty bound, extremely precise on the present occasion, I would say that, excluding from our consideration those cases so frequently received in cholera hospitals, and in which, from the duration of the attack, or the age of the

patient, we are precluded from cherishing the remotest hope, *fortunate results, in attacks of great severity, seem to me to have taken place in a larger proportion where the above plan has been adopted, than from any other mode of treatment which has been followed under my observation.* It would be quite idle to theorise here upon the matter; and it may be sufficient to say, that, in the fortunate cases, the discharge of bile seemed to be forced, as it were, under the above treatment; soon after which the pulse became more perceptible, and a gradual return of warmth, with an amelioration in all the other symptoms, followed. Until the appearance of bile and the improvements in the symptoms, it is far from being the object of the gentlemen to whom I allude to allay the irritability of the stomach, in the stage of collapse,—a very tranquil stomach being often among the worst signs we can have when other very characteristic symptoms exist. From Dr. Pinkard, the zealous gentleman in charge of the parish cholera hospital of St. Giles's, and from Mr. Marsden, another very zealous gentleman, who is in charge of the Free Hospital in Greville-street, and who first, I believe, adopted systematically the use of large draughts of water, every information will, I am sure, be readily obtained respecting what I have alluded to.

“It may be of importance to draw the attention of the public to a circumstance, which I do not find has been previously remarked by authors, which is, that in a state of collapse reaction does not usually commence, be the treatment what it may, excepting where injection of a fluid into the veins has been employed, before a certain round of time or a cycle, which is seldom under 24 hours, and in some cases protracted to double that time. It is also deserving remark, that since the day I saw the first case of malignant cholera in London, (John Webb, of the Grenadier Guards, taken ill on the 15th of January) up to the present time, I have not seen,

out of several hundreds, or heard of, any males attacked *but one*, between the ages of 12 and 24—and of females between the ages of 12 and 17, *but two*—curious enough for a ‘contagious’ disease!”

J. GILKREST, M. D.

Deputy Ins. Gen. of Hospitals.  
London, Aug. 31, 1832.

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#### THE USE OF STRYCHNINE INDICATED IN CHOLERA.

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A REPORT OF TWO CASES IN WHICH  
IT WAS EMPLOYED.

By SOMERVILLE SCOTT ALISON, Esq.

FROM an attentive observation of the phenomena of cholera, and from reasoning on its pathology, I was induced to exhibit strychnine, with a view of removing that state which appeared to me to be the proximate cause of the disease, a diminished energy of action of the ganglionic system of nerves. The general character, and a rational theory of the disease, warranted the trial, and presented well grounded prospects of success.

From the symptoms and the general features of the disease alone, are we enabled to draw conclusions regarding its proximate cause, for after death, dissection discovers no constant morbid alteration capable of giving a satisfactory explanation. In our examination of the dead, we invariably find congestion of unarterialized blood, in the great venous trunks of the chest and abdomen, but it will be more in accordance with our knowledge of cause and effect, to regard this state, rather as the consequence, than as the cause of the disease.

From the invasion of the disease, after the vomiting and diarrhoea have continued for a time, we constantly observe that the circulating system loses vigour, lags and gradually fails. Every symptom occurs, that we would apprehend from a failure of the circulation, and these symptoms ap-

pear to be the essential features of the disease. The coldness, the lividity, and shrinking of the body, and the stoppage of the secretions, are the consequences of a faltering circulation. Seeing that the failure of the circulation is the immediate cause of the most alarming and conspicuous symptoms of the disease, we should inquire into its cause, and to that direct our operations with energy and perseverance. The failure of the circulation seems to depend on a diminished energy of those nerves distributed to the circulating apparatus, whose existence in a sound state is indispensable, for the discharge of its momentous function, the circulation of the blood. Without this assumption it will be in vain to endeavour to account for the failure of the circulation: the heart remains unaltered in its structure; no mechanical obstruction can be found in any part of the vascular system, and no change of blood can be detected, till an advanced stage of the disease.

The vascular and nervous systems are most intimately connected, and mutually dependant on each other, so much so, that when one is so far morbidly affected as to interfere with the due discharge of its functions, the other also becomes affected in a proportionate degree.

It appears, that it is in consequence of this mutual dependance of the nervous and vascular systems, that the circulation fails in cholera, a disease in which I am inclined to believe the ganglionic nerves discharge their functions imperfectly. This diminished action, from whatever cause or concurrence of causes arising, will, reasoning *a priori*, produce those very symptoms that occur in cholera.

Anatomy demonstrates that the circulating apparatus is abundantly supplied with nerves from the ganglionic system, which it is but reasonable to suppose, perform a function indispensable for the circulation of the blood, if otherwise they would not be present. If then those parts serve an end, indispensable for the maintenance of

the circulation in its healthy state, it is obvious that if they (the nerves) cease to perform their functions, or discharge them imperfectly, the circulation also will cease or be carried on imperfectly, and be productive of those very symptoms that characterize the collapsed stage of cholera.

Many circumstances tend to support the opinion, that the ganglionic system of nerves is morbidly affected, the failure of those functions, which it is all but proved it discharges; the sudden invasion of the disease, and its being almost without exception confined to those in whom a general nervous debility may be traced.

It will perhaps be urged in opposition to this opinion, that post mortem examinations almost constantly fail to detect any morbid alteration of these nerves, but because we cannot find changes of structure, it does not follow that they have duly discharged their functions, for it is established, that nerves may be affected by very serious functional derangements, without presenting morbid appearances, sufficiently extensive to be obvious to our senses, a point demonstrated by actual examinations of the retina and optic nerve, in some forms of amaurosis, where not even the slightest inclination to morbid alteration could be observed.

Having shewn that it is possible the ganglionic system may have ceased to perform its wonted functions, without discovering morbid alterations of structure appreciable to our senses, and that the whole train of symptoms in cholera are such as we might expect from that affection, I presume we are warranted in concluding, that it is extremely that that state really exists, and is the proximate cause of the disease. The treatment goes far in confirmation of this view, for it is invariably found that those remedies that have been most successful in exciting the nervous system generally, have been most efficacious, while on the contrary those of an opposite tendency have constantly been injurious.

The excitement of the ganglionic

system of the healthy discharge of its functions appeared to me to be the primary indication in the treatment, and it was with this impression that I was led to administer strychnine, a remedy that I was aware had been successfully used in diseases depending on a diminished energy of the nervous system, where no organic change was yet present, as in what has been termed functional amaurosis, and in some forms of palsy. Of the first cases in which it was used, I shall give the following brief report.

*Case 1st.*—At Edinburgh, on or about the 10th April last, I visited Mrs. C. at 2 P. M.; she was about 50 years of age, and in indigent circumstances. I was informed she had been seized early in the morning with severe vomiting and purging, and that she had gradually sunk into the almost hopeless condition in which she then lay. Her aspect was cadaverous; her eyes much sunk; her features contracted and anxious. She was extremely restless, complained of dreadful oppression in the chest, and called importunately for cold water. Pulse at wrist was imperceptible. Her body cold and damp; her voice much altered; her breath cold, and her lips blue. In short, she was so far gone in the collapsed stage of cholera, that a gentleman who had seen much of the disease, said there were now no hopes of her recovery. I immediately applied sinapisms to the abdomen, warm irons to the extremities, and gave internally a little wine. Large doses of colomel, with a small portion of opium and capsicum, were frequently given. A copious warm stimulating enema was administered. A very little wine was administered every half hour. Three hours had now elapsed, no improvement took place, and after ordering the wine to be continued, and the warm irons to be renewed, I left. I now reflected on what more could be done, convinced that unless some very vigorous measures were immediately adopted, dissolution would very soon take place. I resolved to exhibit an agent

capable of exciting forcibly the nervous system, and for that purpose procured some strychnine. I returned, found her worse, bathed in a cold clammy exudation. The carotid arteries were extremely small. As her case appeared now altogether hopeless, I even hesitated to give the strychnine, but as a last effort gave the twelfth part of a grain about seven P. M. I remained till nine P. M. at which time no improvement was perceptible. After ordering the wine and warm irons to be continued, I left for the night, with the impression that she would shortly expired. In the morning I returned, and was truly astonished to find her much improved. Her pulse at wrist was beating distinctly, and her body of good heat. She continued to improve rapidly, the pulse rising, and the secretions returning. Symptoms of vascular excitement in the head supervened, but were speedily removed by the immediate application of leeches to the temples. She ultimately recovered.

I cannot regard the recovery of this woman, but as most extraordinary, and as deserving the attention of the profession. From the time, two P. M. that I first saw her, till seven P. M. when the strychnine was administered, she continued to sink, notwithstanding the powerful and reiterated efforts made to bring about reaction, including sinapisms, wine, ether, ammonia, various aromatics, and colomel and opium. It would therefore appear that the improvement that took place in the course of the night could not be produced by these remedies, when we know they were employed for so many hours without the slightest appearance of benefit. It can scarcely be supposed that those means, many of which were omitted after the strychnine was given, could exert the whole system so much, at a time when the body was much less sensible and consequently much less capable of being acted on than it was in the course of the day, when as has been already observed, they were



of no avail. As it seems so very improbable that the reaction should have been effected by the means that were adopted before the strychnine was given, it appears extremely probable that it depended on the known exciting properties of that principle, nothing else being administered that could possibly effect the change.

The result of my experiment appeared to me most important, and to warrant a repetition.

*Case 2nd.*— On the 16th April, about nine A. M. I visited Mrs. J. at Davidson's Mains, a village in the vicinity of Edinburgh. She was about 30 years of age, and of a good constitution. She was in the collapsed stage of cholera. Her body and breath were cold, her features much shrunk, and her eyes much sunk. Complained of great oppression in the region of the heart, and was occasionally extremely restless. The pulse at wrist was imperceptible. Had occasionally cramp in the legs. The vomiting and purging, before violent, had now much abated. The means used in the foregoing case were immediately put in practice with repeated warm enemata; but no improvement being evident at the end of an hour, the eighth part of a grain of strychnine was given; dry warm cloths were applied to the chest and extremities, and the wine, colomel, opium, and aromatics were continued. The strychnine was administered in the same dose every four hours, but she continued in a very hopeless state till four P. M. when I was gratified to find the pulse at wrist quite perceptible. The heat of the body gradually returned, and the pulse became more and more distinct in the course of the evening. She daily improved in strength, and ultimately recovered in the course of three weeks, not however without suffering much from some gangrenous spots that appeared where the sinapisms were applied.

It may be proper to state here, that the treatment of these two cases, exclusive of the strychnine, was much the same, as had been unsuccessfully

adopted in about twenty-five cases, in many of which the collapse was less severe when first seen, than in the two which I have reported.

87, Norton-street, London.

THE

*London Medical & Surgical Journal.*

Saturday, September 22, 1832.

INTERESTING DETAILS, SHEWING THAT MALIGNANT CHOLERA DOES NOT SPREAD FROM THE PERSONS OF THE SICK.

WE have been handed a paper containing some extremely interesting details, drawn up by a gentleman who arrived in this country from India some months ago. The subjoined copy is, furnished to our readers as being admirably calculated to shew how deplorably this nation has been used by a joint-stock company of Contagionists, who, with their cads and branch concerns, *have been suffered* to mystify most shamefully things of the highest importance to every family throughout the land:—

“Towards the close of the year 1827, the right and left wings of the 41st. Regt., serving in the Presidency of Madras, and stationed—the first at Ballgarry, in the ceded districts,—the latter in Belgaum, in the southern Mahuratta Dooab, about 200 miles asunder,—received orders to take the field with a large force, against the Raja of Kholapore, a refractory Maharatta Chief. The left wing, under my medical charge, marched from Belgaum on the 21st. Sept.; the right wing from Bellgarry about the

same time; and the whole force, amounting to six or seven thousand men, became concentrated on the Plains of Khottaboggie, before the middle of October.

During the first three weeks of our march from Belgaum, scarcely a man was reported sick in my division; and the whole of the troops, native as well as European, continued remarkably healthy, until cholera made its appearance among the camp-followers, and some of the native regiments. At this time we were encamped in an open, undulating country, in the neighbourhood of a deep and muddy river, (the Dhood Gunga) and the ground allotted for the 41st Regt. was a valley, through which ran a small and shallow *nulla*, the water of which trickled slowly over a sedgy bottom. The whole of the ground too was composed of that rich alluvial soil known commonly by the appellation of "cotton ground"; deep, black, almost swampy, and peculiarly fertile. The whole country, however, for many miles round, was free from jungle; and, with the exception of this spot, appeared well chosen for the encampment of an army. On first reaching our ground, I represented the impropriety of placing a regiment in so dangerous a situation; and recommended that we should be advanced upon the brow of an adjoining hill; but, from a disinclination, I presume, to break up the uniformity of the line, we were allowed to remain three days on the spot first marked out for us.

On the third day of our halt here,

the right wing of our regiment marched in; and, on that morning the first case of cholera was reported in the corps. Three others occurred during that day, all of which proved fatal; the two first within the short space of three hours.

From the moment the head-quarter wing joined us, the men of both wings (no apprehension of contagion having ever arisen) became mixed up as usual: sleeping in the same tents, messing together, and having, indeed, amongst each other, an intercourse more than ordinarily free, from having been many months separated at remote stations. Yet, although the disease, with us, lasted about a fortnight, (during which time 64 cases occurred) and continued, even longer, to spread its devastating influence around us, it is a singular fact that *not a single individual belonging to the right wing was attacked with the disease, which confined itself entirely to the men of the left.*

In addition to this, I may mention that a corps of Madras Native Infantry (the 49th) brigaded with us, and encamped beside us daily, during the period of our service in the field, suffered from the disease to a very frightful extent, having lost nearly one-half of its numbers; *so that the men of the right wing of the 41st were on all sides surrounded by sources of contagion*, if such a cause for the propagation of the disease had existed.

It is necessary to mention, that the day after the wings of the regiment became united, and that cholera showed itself in our camp, we broke ground

in advance, and continued for some days to march eight or ten miles daily, as it was found that the frequent changing of scene, exercising the men, and keeping them actively employed, appeared to exert a beneficial influence upon them.

“GEO. R. DARTNELL,

“Assist. Surg. 41st Welsh Regt.  
“London, 12th April, 1832.”

Be it recorded, to the eternal disgrace of that part of the profession in this country which had been unfortunately consulted on the question of the contagious property of malignant cholera, that while an official opinion, on the most vague grounds, was given in the affirmative, volumes of details from India, perfectly at their command, shewing, like the above, that the contrary was actually the case—were totally rejected, or, to use the expression admitted to have been adopted by those sages—were “*thrown overboard!*”

On one point, certainly, has the Government of this country shown wisdom during our epidemic—they *did not adopt* the fiendish recommendation of cordons, of marking the houses of the sick, &c. &c. which would have, along with other horrors, produced anarchy and confusion from one end of the country to the other. Although (monstrous to say) the prime mover and suggestor of these abominations is still suffered to have sway in matters of vital importance to society.

#### CONTAGIONISTS CONFOUNDED.

We lately adverted to the imposition attempted to be practised on the public by some of the joint-stock company, who, with that art for which they had been so scouted by all honest men at Gibraltar, in an epidemic season, stifled all accounts of cases of cholera in London, until a case could be one way or another coupled with a ship from an *infected* port. We can now state positively, on the authority of Mr. Watson, Surgeon-Major, and Mr. Johnson, Battalion-Surgeon of the Grenadier Guards, that the case of John Webb, of that regiment, which occurred in Tothill-fields Barrack, *on the 17th of January* last, was a most perfect case of spasmodic cholera, and identical with those cases which have occurred under their charge during the epidemic; so that, without going farther back, we have now enough to place at rest for ever the alleged first case in London in the person of a man *on the 6th of February*, who had been scraping the bottom of a Sunderland trader.

Additional facts are daily coming to light upon this point. We are enabled to state from authority, that Dr. Ridgeway, of the Rifle Corps, who has this year seen, in London and elsewhere, cases of spasmodic cholera, declares, after having given the fullest consideration to the point, that several cases which occurred in his regiment at Dover, so far back *as August, 1831*, were identical in character with the former. This it may be recollected was about the time when poor Dr. Marshall's cases

occurred at Port Glasgow, about which that gentleman got into so much trouble, no ship having then arrived to which contagion could, with any plausibility, be traced. Dr. Thackrah, of Leeds, has observed the disease in 1825, and describes it in his graphic work on the subject.

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DISYNTERY SUCCEEDING  
CHOLERA IN PARIS.

We find, by an article in the *Gazette Medicale* of the 11th inst., that within the last fortnight, during which the number of cholera cases has been trifling, dysentery, well-marked in its symptoms, has been prevalent. Although the influence of the "*constitution cholérique*" has been observed in some of these cases, especially the coldness of the tongue for a day or so, the reporter had not seen any of them pass into cholera.

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The cholera has re-appeared in Petersburg, Cronstadt, and other parts of Russia. It has also reappeared at Pest. In spite of quarantine, we find it has appeared at Milan.

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CHOLERA AMONG THE LUNATICS  
OF HASLAR HOSPITAL.

In our remarks on the cholera among the lunatics in the Bethnal Green establishments, which we gave in our Number for the 1st September, we noticed the fact of not a single attendant on the cholera patients having been attacked. We can now state the following facts, on the authority of Sir Wm. Burnett. This gentleman found, on a late visit of

inspection, as Physician-General to the Navy, that a sudden explosion of cholera took place among the lunatics occupying a particular wing of the establishment in question;—that of twenty-five cases (chiefly old persons), thirteen died;—that the source of the disease could not be traced to contagion;—that in two other ranges of the building no case occurred; and, finally, for the information of the curious in contagion, that, throughout, *not a single attendant on the cholera cases was attacked.*

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RAMADGE v. RYAN.

IN reply to numerous correspondents, we state, that an application to set aside the verdict against Dr. Ryan will be made next term; but the result may or may not be successful. It is impossible to say, in what way the Judges will decide, though we have strong reason to anticipate that the verdicts for the Farthing and the £.400, for the same libel will be reversed, and new trials ordered in one or both cases. We are informed that it is almost unprecedented to grant a new trial on the grounds of smallness of damages, and therefore the first verdict will most probably be confirmed. If this should be the decision of the full Court, or four Judges, the second verdict cannot stand. In the event of a new trial, new costs will be incurred, but then the £.400 damages will dwindle to one farthing. As the law stands, there must be a verdict for the plaintiff, and though he is awarded the smallest coin in

the kingdom for the injury done his reputation, the defendant will have to pay heavy costs; in fact, "the litigants for the oyster are awarded a shell each, and the lawyers the fish." Is it law or justice, that a party who is defendant must incur £.200 or £.300 costs, because he has injured his neighbour to the amount of a farthing? Nevertheless, this is the law of England, said to be founded on the law of nature, on reason, and on justice. We are, however, so stupid, as to maintain that a law which compels a man to pay such a large sum for an injury estimated at a farthing's value, is not natural, reasonable, or just. It is only calculated to enrich lawyers and to fleece the public. But it must be obeyed.

There is one thing certain, that Dr. Ryan is solely responsible for costs, though he may succeed in setting aside the verdict for £.400 damages, and these he has incurred by defending the character and dignity of his profession. A few independent physicians and surgeons in London and Dublin have confirmed the truth of this position, as they resolved "that Dr. Ryan was actuated entirely in the publication of the alleged libel, by a strong feeling for the honour of his profession, that in their opinion the damages were excessive, and that the expenses incurred by him ought to be defrayed by the profession at large." It must, however, be observed, that these resolutions seem to have had little effect upon the medical profession—a body of enlight-

ened men, which amounts to 10,000 individuals at least, in Great Britain and Ireland, and of these, about 50 have as yet felt the insult offered them by being associated with a notorious empiric, whose intuitive knowledge of medicine was said to be equal, and indeed, superior to that of the brightest ornaments of the faculty.

We make these observations, to shew our opponent at the trial, that the whole profession have not conspired with us to ruin Dr. Ramadge, as was most falsely stated by his counsel at the late investigation.

### Hospital Reports.

#### WELBECK DISPENSARY.

##### PERICARDITIS.

JOHN GRIFFIN, *ætat.* 15, admitted under Dr. Bartlett, August 17, 1832, residing at 7, Little Chesterfield-street, is an errand-boy, consequently much exposed in the open air, but has not, according to the mother's report, caught cold in any way lately. He complains of severe pain in the region of the heart, which has continued for six days, but is not at present to so great a degree as when it commenced; short, hacking cough; pulse rapid and small, 130; great languor and depression; countenance quite characteristic of the complaint, livid appearance of the lips, and an areola around the eyes; constant dyspnoea to a great extent, increased on the slightest exertion; palpitation and excessive action of the heart, as shewn by auscultation; no tendency to syncope; tongue clean; bowels perfectly regular, although much purged when first attacked.

The pain in the region of the heart was preceded, the night before, by nausea and sickness; attributes the affection to taking a quantity of spirituous liquors in the course of that day; is not aware of any other cause; has not had rheumatism. He has been under medical treatment; was bled, leeches, and had had medicine, the nature of which cannot be ascertained; four leeches were applied yesterday to the region of the heart.

*App. Hirudines, xij. regioni cordis.*

R. *Hyd. submur. gr. ij.*

*Pulv. opii. gr. ʒ.*

*Conf. ft. pil. nocte maneque sumend. tales vj.*

R. *Tinct. digitalis. ʒj.*

*Mist. demulcent. lbss.*

*M. ft. mist. capt. cochlear. maj. ij. ʒi. quæque horâ;*

low diet, perfect rest, and to preserve the horizontal position.

28. The pain was diminished, less constant, and more diffused over the chest by the application of the leeches; pulse smaller, frequent and irregular every tenth beat, 110; tongue covered with a brownish fur; bowels regular; dyspnœa less; the languor not so great; palpitations diminished. Is evidently better; pain not increased on inspiration, or on pressing on the parietes of the chest.

The mother states now that, previous to the attack, the boy had slept in damp sheets, and had also taken large quantities of cold water while hot, on the day immediately preceding the attack.

*Rep. pil. et mist.*

29. Is considerably improved; pulse smaller, 110; complains still of pain in the chest and region of the heart; dyspnœa less urgent; bowels regular.

*Applicentur hirud. xij. pectori.*

*Hyd. submur. gr. ij.*

*P. opii. gr. l-6th. M. ft. pil. 6tis horis sumend.*

R. *Tinct. digital. ʒj.*

*Ant. tart. gr. iss.*

*Liq. amm. acet. ʒj.*

*Acid. tart. ʒij.*

*Potass. carb. ʒj.*

*Aqua. lb. ss. M. coch. med. 6tis. horis.*

30. Is nearly free from pain; pulse small. *Rep.*

31. Is quite free from pain or uneasiness; breathes easily; pulse very small, 80; bowels regular.

*Rep. pil.*

*Mist. ut antea. coch. ampl. ij.*

*Bis die tantum.*

Sept. 1. Nearly well.

## ST THOMAS'S HOSPITAL.

### SYNOCHUS.

JOHN LOUCH, a policeman, aged 30, of a plethoric habit, came into Jacob's ward of this hospital, under the care of Dr Elliotson, on the 21st August last. States that he was at Epsom races, where he had the charge of some men, and after becoming greatly heated from exertion, he went into a public house, and sat in a room with the door open until he felt quite chilly, the next day he found that he had taken cold; on the Friday following he was stationed at St. James's palace, from nine in the evening until two the following morning without his great coat; after he had been on duty about three hours, he experienced cold chills succeeded by heat. The next day (Saturday) he became worse, felt pain in his limbs, which continued Sunday and Monday, with great depression of spirits. He continued nevertheless his employment up to Tuesday morning, when he felt sick with a shooting pain in the head and eyes; at the time of his admission these symptoms were present, his countenance flushed, pupils rather dilated; tongue coated with fur, about the centre and base, its tip and edges being very red; has pain in his chest with cough, skin nearly natural, feet cold, pulse full and hard, 96; bowels not open for two days.

V. S. ad ʒix R, *Hydrarg. submuriat. gr. ix omni nocte.*

*Hot bottles to his feet.*

22.—Has been very restless the whole night; his bowels were open

early this morning, since then the sickness has left him; pain in head, relieved from bleeding; from pressure he experiences pain in the epigastrium; urine scanty, of a high colour, and after standing deposits a sediment, it also possesses an acid property; pulse hard and full, 90 in a minute; tongue the same as yesterday, fever of an intermitting character, the paroxysms come on every hour, countenance anxious; feels very low during the absence of the fever. Pergat.

23.—The exacerbations come on with greater severity in the evening, with delirium, since two o'clock A.M. his bowels have become relaxed; has slight pain from pressure upon the abdomen; cough troublesome; does not expectorate much; urine not of so high a colour, nor does it deposit so much sediment as before, still however it retains its acid property. Tongue tremulous, cannot protrude it far from his mouth, it appears broad, and a little swollen, in other respects the same; countenance more anxious than yesterday.

R. *mist. cretæ comp.* ʒ iss. *post singulas sedes liquidas.*

24.—Diarrhœa nearly subsided; he was delirious the whole of the night, complains this morning of pain in his head, there is also great heat about his forehead and temples, dimness of sight, feels sick and is troubled with an unpleasant taste in his mouth, which is dry and clammy, skin hot and dry, tongue has a varnished appearance; in other respects the same as yesterday; sordes collected about his teeth and gums, urine more copious, it does not deposit so much sediment, neither does it redden litmus paper; pulse 100.

*Tepid sponging.* R. *mist. citric sextis horis.*

9. P. M.—He is very delirious, and suffers much from pain in the epigastrium.

*Catiplas sinap. amp. epigastrio.*

25.—Exacerbations continue. was

delirious the whole night, takes little notice of anything except when spoken to. At my visit the paroxysm was coming on; pulse at this time 112, full and hard, pain in abdomen better, countenance flushed, tongue glossy, less parched, darting pains in his head; cough troublesome, respiration affected; sonorous rattle in chest, evidently a slight attack of bronchitis.

*Emp. Lyttæ Sterno.*

*Hair to be cut close, and cold cloths to his head.*

26.—Respiration and cough better, has no pain in his abdomen, bowels regular, stools of a good colour, tongue remains glossy; lips parched; countenance still anxious, and of a dusky brown colour; urine natural, does not deposit much sediment, delirium continues, with pain in the head, accompanied with heat about the forehead and temples; exacerbations continue; pulse 110.

*Hirudines xij. temporibus. Tepid bathing continued.*

27.—Has been delirious the whole night; he remains almost senseless. The centre of the tongue, which was covered with brownish fur, is now red and glazed, its base retaining the same appearance as yesterday; at my visit the exacerbation was going off; complains of pain in forehead, and temples. He was seen this morning by Dr. Roots, for Dr. Elliotson.

*Abradatur. capil. Rep. lotio frig. capiti.*

*Hirudines xvj. temporibus.*

28.—Delirium continues, although not so violent as yesterday, pain in the head better; cough rather more troublesome; expectorates a little; tongue the same; bowels regular; urine natural; pulse 108, rather hard; countenance anxious. Dr. Roots visited him to day.

*Hirudines xij. temporibus. Rep. lotio capiti.*

30.—Still continues delirious; gets little rest at night; lips, gums and skin remain the same; urine natural; it has a very slight deposit of

ter standing; pulse rather hard, 110; countenance retains the same brownish appearance. He was visited again by Dr. Roots.

*Hirudines viij. temporibus. Emp. canth. nucha.*

July, 1.—Remains much in the same state; paroxysms continue; has not been quite so delirious; should the delirium continue, another blister to be applied to the neck.

2.—The delirium was not so bad, therefore the blister was omitted; tongue remains glossy; lips parched; sordes continue about the gums; countenance the same; viz. anxious, and of that brownish cast; bowels costive; urine less in quantity, and of a high colour; pulse small, 100; Dr. Roots saw him to-day, and found him in the state described.

*R. Pulv. Rhei grx. statim et grv. rep. 5tis horis.*

*R. Sulph. quinina. g. j. absenti fibre.*

3.—Bowels open, in other respects the same. Dr. Elliotson saw him this morning, and ordered the quinine to be increased to two grains every four hours, and to take

*Milk, beef tea aa lb. ij. quotidie.*

July 5.—Dr. Elliotson saw him again to-day, delirium continued the whole night; paroxysms continue the same; pulse small, 112; bowels kept open by rhubarb; tongue, lips and gums as yesterday. Pergat in usu medicamentorum.

6.—At my visit this morning, 8 o'clock A. M. I observed a great change. His countenance indicated the greatest distress; about every three or four minutes, he was seized with a sudden chill, which appeared to shake his whole frame. Urine, and fæces passed involuntarily; pulse hurried, not countable, subsultus had come on, his lower jaw dropped, tongue was now nearly black, so likewise was the collection of sordes about his gums; he became all over in a cold clammy sweat, the drops falling from his cold skin on the bed;

his feet, I must add at the same time were warm, and of a gentle moisture, the only favourable symptom presenting itself; he appeared to me in articulo mortis. I now left, and returned at one o'clock P. M. and found him remarkably changed for the better upon my advancing to the bed side, he opened his eyes. His skin, instead of being cold and wet, had become warm and moist, I could actually observe the black fur covering his tongue and gums, crack, and a kind of moisture poured itself between them; his whole countenance much changed; pulse small and feeble, 86; has had no paroxysm since two o'clock this morning.

7.—Has not been delirious since the change took place, tongue moist, and nearly clear, sordes left the gums; lips moist; countenance improved; bowels not open since yesterday morning; his back has become sore.

*Continue beef tea, milk and quinine Injicietur enema statim.*

8.—He was very restless the whole of last evening, until about two o'clock, when his bowels became open; after that he slept soundly; this morning he awoke quite hungry; tongue moist, does not complain of thirst, which I should have named has been a constant symptom throughout; skin comfortable; since the fever turned there has been a greater sediment in his urine which is nearly of a natural colour; complains of his back being very sore. Pergat. Back Poulitced.

Eight P. M. his bowels have not been open to-day.

*Injicietur enema statim.*

9.—Continues to mend; there is great discharge from his back; bowels open this morning from injection.

10.—Early this morning diarrhœa came on, succeeded by great prostration of strength; cough, which had been pretty easy for some time, now began to trouble him, with pain across the upper part of his chest; a return



of his old complaint, bronchitis; tongue red, and rather dry; pulse small and quick, 100; countenance again anxious; thirst; skin moist.

*R. Inf. catechu* ℥iiss *part singulas sedes liquidas.*

11.—Bowels much better; slept well during the night; cough and respiration the same; urine natural; pulse small, 76.

*Emp. lytae pector. pergat in usu medicamentorum.*

12.—Bowels regular; tongue moist; appetite good; skin and urine natural; great discharge from his back, which is very sore; cough, and respirations better.

*Pergat in usu medicamentorum sine. Inf. catechu.*

*Beef tea, milk an. lb. iij quotidie. Two eggs daily.*

13.—Continues to improve, feels very hungry.

*Four eggs daily—beef tea. Vin. rub. ℥iv quotidie.*

25.—Has continued gradually to mend since last report; back better; bowels confined.

*Extract colocynth comp. gr. vj. omni nocte Mutton chop daily, porter lb. iij.*

27.—Continues to gain strength.

*Milk decreased ℥ij. quotidie.*

Aug. 14.—Has continued to gain strength up to this time, left off taking medicines since the 12th of August; this morning diarrhoea came on, with slight febrile symptoms.

*R. Inf. catechu* ℥iiss. *post singulas sedes liquidas.*

Sep. 4.—After taking two doses of the inf. catechu, the diarrhoea was checked; since then his back has got quite well; and he appears to have regained his former strength. Dr. Elliotson therefore presented him, for Thursday, but detained him another week, owing to a return of the diarrhoea, when the man left the hospital, being very thankful for what had been done for him.

The members of the profession, who consider the damages awarded in the case of Ramadge v. Ryan excessive, have commenced a subscription to enable the defendant to apply for a new trial, or defray his expenses.

## SUBSCRIPTIONS RECEIVED.

	£.	s.	d.
Dr. James Johnson	10	10	0
Dr. Uwins	2	2	0
Dr. Tweedie	5	5	0
W. B. Costello, Esq.	5	5	0
A. C. Hutchinson, Esq.	2	2	0
J. P. Holmes, Esq.	2	2	0
Greville Jones, Esq.	2	2	0
— Skey, Esq.	2	2	0
A Naval Surgeon	2	2	0
J. Foote, Esq.	1	1	0
M. W. Henry, Esq.	1	1	0
Dr. Harrison	10	10	0
Dr. Blicke	5	5	0
Morgan Austin, Esq.	2	2	0
A Dresser of St. Bartholomew's Hospital	2	2	0
E. L. Devonald, Esq.	1	1	0
P. Reilly, Esq.	1	1	0
Alex. McNab, Esq.	1	1	0
M. D.	2	2	0
Dr. Hood, Brighton	5	5	0
W. Hughes, Esq.	1	1	0
W. F. Crump, Esq.	1	1	0
A Lady	2	2	0
J. Ingleby, Esq.	1	1	0
Professor Cooper	2	2	0
E. A.	5	5	0
A Hospital Surgeon	5	5	0
Dr. Sigmond	5	5	0
M. Downing Darwin, Esq.	1	1	0
A Country Surgeon	1	1	0
G.	1	1	0
Sir Charles Aldis	1	1	0
Dr. Aldis	1	1	0
G. Jewel, Esq.	1	1	0
T. Radford, Esq. Manchester	2	2	0
A.	1	1	0
Dr. Graves, Dublin	1	1	0
Dr. Montgomery, ditto	1	1	0
Dr. Leahy	1	1	0
Dr. Harty	1	1	0
Dr. Apjohn	1	1	0
Dr. Stokes	1	1	0
Dr. Fergusson	1	1	0
Dr. Collins	1	1	0
Dr. Breen	1	1	0
Dr. J. Labatt	1	1	0
Dr. Colles	1	1	0
Dr. Churchill	1	1	0
Messrs. Hodges & Smith, ditto	2	2	0
A True Friend	1	1	0
W. D. Mayne, Esq.	1	1	0
S. Cusack, M.D.	1	1	0
J. H. M.D.	1	1	0
John Mahony, Esq.	1	1	0
W. J. Rose, Esq.	1	1	0
Dr. Copland	1	1	0
A Friend	1	1	0
A. B.	1	1	0
Dr. Hope	1	1	0

SELECTIONS  
FROM THE  
CLINICAL LECTURES,  
DELIVERED AT THE  
HOTEL-DIEU IN PARIS,

*During the Session of 1831 - 32;*

BY BARON DUPUYTREN,

PRINCIPAL SURGEON OF THAT HOSPITAL.

*On Luxations of the Vertebrae and the diseases they simulate.*

THE displacement of the bones has been so well observed, and so accurately described, this portion of the healing art has arrived at so high a degree of perfection, that it would seem as if from henceforth we should only attend to the facts collected, and the principles established by authors. Nevertheless, says M. Dupuytren, is it not with this part of medicine as with all the other branches of science, the real extent of which is very often not perceived until the difficulties are surmounted that conceal these from the eyes of the observer. The articulations of the vertebrae, placed, on account of the limited extent of their movements, and from the nature of the ligaments, that unite the bones of which they are composed, at the bottom of the column of moveable articulations, have always appeared very little subject to luxations, so frequently observed in articulations of greater motion and contiguous surfaces; and with the exception of luxations of the first cervical vertebra on the second, the others, either have not been observed, or completely denied by the greater number of writers. Several ancient authors, continues M. Dupuytren, have spoken, it is true, of this displacement; but as they could not join to the observations, they have transmitted to us the results of dissection, their opinion remains without weight, or else is entirely rejected; and especially since the culture of

pathologic anatomy permits us to trace the effects of disease to their causes, the idea of the possibility of this displacement has been renounced. In short, the number and strength of the ligaments that unite these bones, the vertical or slightly oblique direction of the articular apophyses, the reciprocal reception of these processes, the extent of surface by which these vertebrae support each other, and the very little motion they have, ought, at least, to render this luxation very difficult; and if, on the other part, we consider the facility with which the bodies of the vertebrae are ruptured during life, in consequence of the exertions that the vertebral column supports, or else, after death, in the experiments a thousand times made on this subject, we shall be a little astonished at the opinion that the greater number of the moderns have advanced on this disease. The disposition of the articular apophyses of the vertebrae causes difficulties so great to luxations of these bones, that it appeared very difficult to some authors to conceive that it could take place while they existed. This opinion, which appears very well founded, says M. Dupuytren, gives additional weight to the observations that I am about to cite; and yet, the luxation of the bodies of the vertebrae, which the preliminary fracture of the articular apophyses had facilitated in two of these observations, may likewise take place without this fracture; and this will be proved by the third observation, the most important of these I have collected on this subject. These reflections apply particularly to the vertebrae of the dorsal region, and still more to the lumbar region, which have a much larger body than the others, and the articular apophyses vertically elongated.

Besides, the greater number of practitioners now think, that cases of luxation of the lumbar and dorsal column, characterised by a sharp, angular curve (sometimes a right angle), and a permanent bending of the loins or back, with or without paralysis of the inferior members, coming on in consequence of a violent blow on the trunk, from tum-

bling, from a fall off a height on the neck, from which some patients have recovered, subject always to a vicious direction of the spine, were from fractures of these parts. But if authors have rejected luxation of the bodies of the vertebræ as impossible, they admit, on the contrary, those of the articular apophyses, and especially that of the atlas with the axis. In order to understand the mechanism of this last luxation, we will, adds M. Dupuytren, give some information about these vertebræ.

The atlas articulates by its anterior arch, with the odontoid process of the axis, and by its lateral masses, which offer a large and almost smooth surface with the lateral masses of the same vertebræ, which present articulated surfaces. The means of union of these two bones, bound by a capsule and a transverse ligament, intended to complete the ring in which the odontoid process is received, would expose them to injury if they were not subject to a particular ligamentous apparatus, extending from the occipital to the axis, and composed of two lateral, the accessory, the suspensory, the transverse, and above all, the great ligament itself, from basilar apophyses to the posterior surface of the body of the fifth vertebra.

It is this apparatus that causes all the solidity of these articulations; it is this that restrains the rotation of the head within proper limits; and it is this also that, by its elasticity, opposes these articulations which alone participate in the flexion of the head, from which result the partial motion that the cervical vertebræ execute. Luxation of the atlas on the axis may be produced by violent flexion of the head, or by the effects of a forced rotation of this part; always accompanied by compression or rupture of the spinal marrow by the odontoid process, and the body of the axis; it is immediately mortal, and is beyond the assistance of art. The cases of cure of this disease that is to be found in some books, were cases of luxation, limited to the articulation of the articular apophyses of some of the other cervical vertebræ.

Luxation of the other cervical vertebræ is usually limited to one of the articular processes; it is often produced by too sudden a movement, made to look backwards; or it has likewise occurred in children from the effects of tumbling on the head, when the neck, too feeble to support the weight of the body, has been sprained and turned on one side, a necessary circumstance in the production of this sort of luxation. The reduction of these luxations is very dangerous; the patient is often found to perish from the effects of compression and extension of the spinal marrow, which are inseparable results of these attempts.

*Petit Radet* has seen a case of a child who expired during the manœuvres requisite for its reduction. At present it is generally re-

commended to leave the disease to itself. The pains subside by degrees; but the individual ever after has an inclination of the head. The details which we have just entered into, continues M. Dupuytren, will make us comprehend better the different diagnosis of false luxations, of which we shall mention several cases in the second part of this lecture. Let us now relate some observations relative to luxation of the body of the vertebræ. First observation, rupture of the ligaments of the body of the vertebræ, without displacement. A man, fifty years of age, waiting at the back of a cart, the body set, the head and neck inclined forward, while there was a quarter of beef placed on, when the burden slipt from the hands of the man that was holding it; it fell with force on the butcher's neck, and crushed him to the earth. He was immediately removed to the Hôtel Dieu, where we saw him the next day, deprived of motion and feeling, in all the inferior members of the body. The posterior and inferior parts of the neck, painful to the touch, and on the least motion, presented a large ecchymoses without swelling, and a manifest crepitation was felt in this place, when the patient's head was turned or even raised. Motion and feeling were extinct in the arm, in the parietes of the thorax and abdomen, and in the inferior members; there was paralysis of the bladder and retention of urine. The diaphragm, the muscles of the face and neck were alone capable of contraction; respiration was difficult, and nevertheless, the voice was scarcely altered. The patient remained for two or three days in this state. At the end of this time, the respiration became on a sudden extremely difficult, laborious, and embarrassed; the pulse irregular, the eyes projecting, the skin red and livid; at last the patient expired, with all the symptoms of actual suffocation. On opening the body, we found a very large ecchymoses around the lower cervical vertebræ. The intervertebral substance that unites the fifth and sixth vertebræ of this region, was completely torn, and the body of the latter perfectly untouched. The transverse and articular spinal apophyses of the fifth, sixth, and seventh cervical vertebra were broken, and it was possible to cause a displacement from the front to the back of the superior part of the vertebral column on the inferior. The spinal marrow at first seemed untouched, notwithstanding the disorder of the surrounding parts, except that they were a little more voluminous than usual; but scarcely was it longitudinally divided when the centre was found reduced to a sort of decomposition, and mixed with blood.

THE  
ANATOMICAL EXERCITATIONS  
OF  
WILLIAM HARVEY, M.D.

(Continued from page 197.)

CHAP. XVII.

*The motion and circulation of the Blood are confirmed by those things which are apparent in the Heart, and from those things which appear from anatomical dissection.*

I do not discover the heart in all animals to be a distinct and separate part; for some animals have not a heart, as the zoophytes or plant animals, and animals which are of a colder habit of body, of a softer texture, of small bulk, and of a similar constitution, as in the genus of round worms and snails, and those which originate from putrefaction, and preserve no species. This species have not a heart, as they have no need of impulsion by which the aliment is driven into the extremities; for they have a body conate, and one whole and indistinct without limbs, so that by the contraction and relaxation of the whole body, they receive and expel, move and remove the aliment. They are called plant-animals, such as oysters, muscles, sponges, and all genera of zoophytes, have no heart, because they use their whole body for a heart, and as if the whole body was a heart in these animals.

In very many, and almost all genera of insects, on account of the smallness of their body, we are not able to discern rightly every part; yet in bees, flies, wasps, and the like, we may do so sometimes by the aid of a microscope. Something pulsating is to be seen also in lice, in which we see the passage of the aliment through the intestines (this animal being transparent); you will be able clearly to behold it like a black spot, and that will be enlarged with the assistance of the microscope. But in those that have no blood, and are cold blooded, as in snails, shell fish, crusted-shrimps, and the like, there is a little part which pulsates (like a little vesicle, or an auricle without a heart) making its contractions, but which contracts itself rarely, and puts forth its pulse, and which cannot be discerned unless it be in summer, or a very warm season. In these creatures this particle is ordained so, because there is a necessity of some impulsion for the distribution of the aliment, on account of the variety of the organic parts, or the density of their substance, but their pulsations become rare, and oftentimes not at all, arising from their coldness, natural to them, which are of a doubtful nature; so that sometimes they seem to live, sometimes they appear to die, and sometimes to possess the life of

an animal, and sometimes that of a plant. This likewise seems to be the case in insects, when they are torpid, in winter, and are secluded, as if they were dead, or only vegetable. But whether this likewise happens to some animals that have blood, as to frogs, snails, serpents, swallows, it is not lawful for us here to doubt.

But in the great animals, and those which are warm-blooded, there is an impulsion of the aliment required, and this perhaps with greater force; therefore, in serpents, fishes, snakes, frogs, snails, and the like, there is but one auricle, and one ventricle of the heart given to them, from whence arises that most true axiom of Aris. de part. Anim. that no animal possessing blood wants a heart, by the impulsion of which it is made stronger and more robust, and the aliment is not only agitated by the auricle, but it likewise protrudes out farther and more swiftly.

That in animals yet greater, warmer, and more perfect (as filled with a great deal of warm blood, and full of spirits), there is a stronger and more muscular heart required, by which the aliment may be protruded more strongly, more swiftly, or with greater force, by reason of the great magnitude of the body, and density of the habit.

Likewise, because that more perfect animals require more perfect aliment, and a more abundant natural heat, that the nutriment of them may be concocted, and acquire a further perfection. It was fit that these creatures should have lungs, and another ventricle, which would drive the nutriment through them. So that in whatever animals there are lungs, there are likewise in them two ventricles of the heart, the right and the left, and wheresoever there is a right ventricle, it happens also that there is a left; not from the contrary, that where there is a left, there is also a right.

I call that the left ventricle which is distinguished by place, not by use, which diffuses the blood into the whole body, not into the lungs only; hence the ventricle seems to make up the heart by itself, placed in the middle, and so fenced by the superior cavities, and framed with greater diligence, that the heart seems to have been made on account of the left ventricle, and the right ventricle appears, as it were, a servant to the left, and does not reach to the summit of it, so that its parietes are threefold thinner (as Aristotle says), has a kind of articulation above the left, and is more capacious as administering, not only matter to the left, but giving aliment to the lungs. But it is to be observed, that in the embryo, these things are otherwise, and that there is not so great a difference of the ventricles, but like two kernels in a nut, they are almost equal; the corner of the right reaches the summit of the left, so that in them the heart hath, as it were, a double apex. These things come to pass, because in them, whilst the blood does

not pass through the lungs, as it does from the right sinus of the heart to the left; both the ventricles do perform alike their office, bringing the blood from the vena cava into the arteria magna, through the foramen ovale and ductus arteriosus, as it is called, and equally impel it into the whole body, whence proceeds an equal constitution. But when the lungs are used, and the unions already mentioned become stopped, then the difference of the ventricles commences in their strength, as likewise in the rest, for the right drives through the whole lungs, and the left through the whole body.

Beyond these things there are also found in the heart, tendons, as I may so call them, or fleshy twigs, and very many fibrous connexions, [which Arist. in his book *de respir.* and *de part. anim.* 3, calls nerves] which partly are stretched with a variety of motions, and are partly hidden in the parietes, the sinuses and mediastinum being elevated, as if small, muscles which are contracted. But these are superadded to the heart; as auxiliaries, for the further expulsion of blood, (that like the diligent and artificial apparatus of tackling in a ship,) they might help the heart contracting itself every way, and might squeeze the blood more fully and forcibly out of the ventricles.

But it is manifest from this, because some animals have them; in some they are very small; and all which have them are stronger in the left ventricle, than in the right; some animals have them in the left; and none whatever in the right. But in man there are more of them in the left than in the right, and more in the ventricles than in the auricles and in some auricles almost none; there are more of them in brawny, muscular agriculturists, and such as are of fuller habit of body, in all these animals in which the ventricles are small entirely without fibres, tendons, or sinuses; as in almost all smaller birds, serpents, frogs, snails, and the like, also in the partridge, hen, and greater part of fishes, in these neither nerves, nor as they are called fibres, nor tricuspid valves, are found in the ventricles. In some animals the right ventricle is small, but the left possesses those fibrous connexions, as in the goose, swan, and larger birds; in these the reason is the same, as in all, for as the lungs are spongy, fine and soft, they do not want such force for the protrusion of the blood through them, and therefore these fibres are not or are fewer and weaker; nor so fleshy or muscular in the right ventricle, because the left ventricle has need of more force and strength as it ought to pursue the blood throughout the whole body.

And hence also the left ventricle occupies the middle of the heart, and is three fold thicker and stronger in its parietes than the right. Hence not only among all animals, but likewise among men, by so much the habit of body is denser, harder and more solid, and by so much as they have the extremities,

more fleshy and tendinous, and more remote from the heart, by so much they have the heart more fibrous, hard, robust, and muscular.

And this is manifest and necessary by so much on the contrary as the structure is finer and the habit more delicate, and corpulence less, by so much they have the heart more flaccid, soft, and scarcely fibrous and curved.

Consider likewise the use of the sigmoid and tricuspid valves, which are so formed lest the blood once sent forth, should return into the ventricles of the heart; these are constituted in the orifice of the pulmonary vein and aorta, that while they are elevated and joined by turns, they form a triangular line, such as is left by the bite of a swallow, and which they are shut more closely that they may more promptly prevent the reflux of the blood. The tricuspid valves are janitors in the entry of the vena cava and pulmonary artery lest that when the blood is forcibly impelled should regurgitate, and for that cause they are not in all animals, as I have said, nor in those in which they are do they appear to be made by the same care of nature, but in others more exactly, in others more carelessly and negligently, that they may be closed, for the greater or less impulsion caused by the constriction of the ventricles; so in the left ventricle, that there may be a more diligent occlusion according to the greater impulsion, there are only two mitral valves, that they may close more tightly, and these extend through the middle to the apex. This, perhaps, imposed on Aristotle, as he believed the ventricle was double. A section being made transversely, lest the blood should flow back into the artery, and by that means the strength of the left ventricle, in propelling the blood throughout the whole body, should be destroyed, therefore these mitral valves much surpass those placed in the right in size, strength, and in exact closure. Hence it necessarily follows, that no heart is seen without a ventricle, as it ought to be the spring, fountain, and receptacle of the blood. This does not always happen in the brain. For almost all genera of birds have no ventricle in the brain, as appears in the goose and swan, whose brains equal nearly in size that of a rabbit. But the rabbit has ventricles in the brain, and the goose has not. Likewise where there is one ventricle, there also is appended an auricle, flaccid, cuticular, hollow, and full of blood; and where there are two ventricles there are likewise two auricles. But on the other hand, there is only one auricle in certain animals (but not a ventricle) or at least, a sac analagous to an auricle or the vein itself dilated, making the pulse as in hornets, bees, and other insects, which I believe I can demonstrate by some experiments, to have not only pulse, but also a respiration in that place which is called the tail.

A LIST  
OF THE  
MEDICAL AND SURGICAL SCHOOLS  
IN LONDON,

SESSION 1832—33.

UNIVERSITY OF LONDON.

FACULTY OF MEDICINE.

THE Lectures commence on the 1st of October, and continue to the beginning of May. For the convenience of students, some of the courses may be divided into two parts, and a separate payment be made for each.

The payments stated below for each class are made by students nominated by proprietors: those not nominated pay 5s. additional for every pound until this extra payment amounts to 4*l.* 10s.

An University fee of 10s. for one class, and 1*l.* for two or more classes, is paid by each student every session: where, however, the course is of short duration, this fee is diminished. The *Matriculation fee* of 2*l.* relieves the student, during the whole course of his study, from the University fee.

All fees are paid at the office of the University, where the student receives his tickets, which he afterwards takes to be countersigned by the professor. The office is open from nine o'clock till five, except on Saturday, when it closes at two.

The payment of the fee for the first division, and double the fee for the second division, gives in most classes perpetual admission, provided the student is matriculated.

Weekly examinations are held in every class; and those pupils only who have regularly attended these examinations will be admitted to contend for honours at the close of the session.

LECTURES.

*Anatomy and Physiology*; Professor, Dr. Quain; every day, except Saturday, from two to three. Payment to the University for the entire course, 7*l.*; or for the first division, 4*l.*; for the second, 3*l.* Perpetual, 10*l.*

The object of these lectures is—to lead the student, by a methodical system of instruction, to a correct knowledge of human anatomy and physiology,—and to make him familiar with the applications which should be made of the facts and principles set forth, as well as their subservience to the practical business of medicine and surgery.

The course is divided into three sections. In the *first* will be considered the solid and fluid constituents of the body, their characters and properties; the division of the solids

into their primary tissues—the classification of these,—their conformation and structure, physical and vital properties. This part of the course embraces the subjects usually included under the head "*General Anatomy*," and serves as an introduction to the others, as it affords an opportunity for the explanation of the principles on which the nomenclature of anatomy has been constructed; and of exhibiting some general views of the animal œconomy.

*Descriptive and Structural Anatomy* forms the subject of the *second* section. The osseous system with its connecting media (ligaments and cartilages,) will be fully described, and then successively, each in its proper order, the muscular system, the vessels and nerves, and the various organs contained within the skull, thorax and abdomen. The description will include not only all that relates to the topography and relations of organs, but to their intimate composition and structure.

The *third* section will be devoted to *Physiology*, and exhibit general views of the functions and uses of the different parts and organs previously described, considering them in their various adaptations to the support and well-being of the individual, the maintenance of his relations with the external world, and the continuance of the species.

*Morbid Anatomy*; Professor, Dr. Carswell; Tuesday and Friday, from ten to eleven. Fee 3*l.*

The object of this course is to make the student acquainted with the modifications of organization which constitute a state of disease, or a deviation either of the normal composition or conformation of organs. Considered individually, the physical, anatomical, chemical, and physiological characters of each will be described first; and afterwards the phenomena by which they are characterized, and the modifications which they undergo in the different tissues, systems and organs of the body, will be pointed out and explained. And as this branch of medicine is intimately connected with the practical study of diseases, the modifications of organization of which it treats will also be considered in relation to the causes by which they are produced, the effects to which they give rise, and the remedial means which may be employed for their cure or prevention.

Independently of the facilities which the specimens of organic diseases, preserved in the museum of the University, afford for the illustration of these lectures, great additional advantage will be derived by the student, from the use which will be made of a large collection of coloured delineations, representing many of the more important organic phenomena which these diseases present during life or after death. Every effort will likewise be made to obtain recent specimens of disease, that the practical knowledge necessary to be acquired by the student on this

subject may be made as complete and useful as possible.

*Practical Anatomy*; Richard Quain, Esq.; eleven to twelve. Payment to the University for the whole course, 5*l.*; first division, 3*l.*; second division, 2*l.* Perpetual, 8*l.*

The demonstrations are intended to form a complete course of instruction in practical anatomy. With this view the body will be considered as divisible into a series of sections or regions, each to be made the subject of separate examination. The several constituents (bones, muscles, vessels, &c.) of every such region will be fully described before the consideration of any other part is entered on—and after concluding its description, the mode of conducting the preparation or dissection will be indicated. By pursuing this plan, descriptive anatomy is presented to the pupil in a manner different from that adopted in the professor's lectures, at the same time that the demonstrations are made subservient to the business of the dissecting-room; namely, the study of practical anatomy.

*Surgical Anatomy* will form a separate section of the spring course. The different regions of the body which most frequently become the seat of accidents or diseases, requiring surgical operations, will be described, the various operations performed, and the relative merits of different methods of operation discussed.

In the dissecting rooms the pupils will be assisted and directed in their studies during several hours daily.

*Principles and Practice of Medicine*; Professor, Dr. Elliotson, daily, except Saturday, five to six. Payment to the University for the entire course, 5*l.*; first division, 3*l.*; second division 2*l.*; perpetual, 7*l.*

These lectures are illustrated by preparations from the Museum of Anatomy and a large collection of coloured drawings, exhibiting the various structural changes which disease occasions; and whenever it is practicable, recent morbid specimens will be presented to the class.

*Principles and Practice of Surgery*; Professor, Samuel Cooper, Esq. Monday, Wednesday, and Thursday, half-past seven to half-past eight; examinations from half-past eight till nine, every Thursday evening. Payment to the University for the entire course, 4*l.*; perpetual, 5*l.* 10*s.*

*First division.* Injuries and diseases, common to the whole, or several parts of the body.

*Second division.* Injuries and diseases of individual organs and regions.

*Third division.* The operations of surgery explained, and demonstrated on the dead subject.

*Midwifery and Diseases of Women and Children*; Professor, Dr. Davis, every morning, nine to ten. Payment to the University for the entire course, 5*l.*; first division, 3*l.*; second division, 2*l.*; perpetual, 7*l.*

The subjects of this course will be included under three principal departments, viz. anatomical, physiological, and pathological or practical; the two former treat of the structures and functions of the parts and organs concerned in the practice of midwifery; the latter, of the actual practice of the art itself.

Under this principal division of the course will be given instructions for the obstetric and medical treatment of all varieties of labours, *natural, preternatural, complex, and instrumental*, together with ample histories of the most important diseases incident to the human female during the several epochs of her life, but most especially during pregnancy, and in the puerperal state.

The last section of the course will treat of the principal ailments of infants during the month; of eruptive and other diseases of the skin; of diseases of the alimentary organs; of the morbid phenomena incident to the process of dentition; of convulsions, and of hydrocephalus.

*Materia Medica and Therapeutics*; Professor, Dr. Thomson, daily, except Saturday, three to four. Payment to the University for the entire course, 6*l.*; first division, 3*l.*; second division, 3*l.*; perpetual, 9*l.*

This course is intended to render the medical student familiar not only with the materials which he is to employ in combating disease; but to teach him also what parts of these materials are active, what inert; and how they operate on the animal economy in the treatment of diseases. For this purpose the various substances employed as medicine are exhibited and described, both in their natural state, and in the form of the different preparations into which they enter. The active principles of each are separated and described; and in many instances the operations necessary for this purpose are performed before the students.

One object of this course is to demonstrate to the pupils the circumstances which modify the effects of medicinal agents on the diseased habit. Every part of the course is intended to have a strict reference to practical utility.

A museum has been formed by the professor of this department for the illustration of his lectures, to which the students of his class have access under certain regulations.

Instruction in pharmaceutical chemistry will be given to private pupils in the professor's laboratory, which contains a steam apparatus, and facilities for vegetable analysis.

*Chemistry*; Professor, Dr. Turner, daily, except Saturday, ten to eleven. Payment to the University for the entire course, 7*l.*; first division, 4*l.*; second division, 3*l.*; perpetual, 10*l.*

The first two weeks will be employed in taking a general view of the whole science; the following subjects will then be discussed:—

1. Heat; its properties, and its employment in the arts in domestic œconomy, and in chemistry.

2. Light, chiefly in its chemical relations.

3. Electricity and galvanism.

4. Chemical affinity, doctrine of definite proportions, and the atomic theory.

During the months of January, February, and March, the professor will give the history of the elementary substances, and their more immediate compounds, in the following order:—

1. History and properties of the twelve non-metallic bodies, such as oxygen, hydrogen, &c. and of their binary compounds, such as sulphuric and nitric acids, ammonia, carburetted hydrogen, &c.

2. History and property of the metals, and their compounds—

a. With the non-metallic bodies; such as oxides, chlorides, &c.

b. With each other; such as brass, pinchbeck, and other alloys.

3. History of the salts, or the compounds formed by the union of acids and alkaline substances.

4. The nature, properties, and analysis of mineral waters.

The description of organic substances will then be entered on, divided into the two departments of animal and vegetable chemistry.

The subjects discussed in the lectures will be illustrated by experiments, diagrams, and preparations; and a proper course of reading on chemistry will be indicated.

It is an essential part of this course to point out the useful application of the facts and doctrines of chemistry. Accordingly, the processes of the chemical arts, such as bleaching, dyeing, brewing, distilling, &c. will be described and illustrated. The operations of metallurgy and assaying, by which metals are extracted from their ores, and the value of such ores determined, will likewise be considered. The connexion of chemistry with medicine will be traced:—by teaching how to detect the presence of poisonous substances, and to destroy their energy; by discussing those departments of physiology and pathology which admit of being elucidated by chemistry;—and by explaining the nature of those pharmaceutical preparations which may be regarded as pure chemical compounds, or are produced by complex chemical processes. The chemical phenomena of the material world will also be described;—as for example, meteorological appearances,—the formation and composition of minerals,—and the changes produced on the surface of the earth by chemical agency.

During the course of the session there will be a class of practical chemistry, which will commence towards the close of January.

The professor will receive a few private pupils, who may work daily in the laboratory in the study of experimental and analytical

chemistry. He will give information on the subject to those who apply to him.

*Comparative Anatomy*; Professor, Dr. Grant. Daily, except Saturday, three to four. Payment to the University 3*l.*, commencing the 1st of October, and continuing to the 1st of January.

In his course the organization of the whole animal kingdom is considered. The varieties presented by the internal organs, and the modifications of their functions, are examined in every class of animals. The lectures and demonstrations are illustrated by recent dissections, by an extensive series of zootomical preparations, and by drawings, &c. The osseous and muscular systems are first examined, from the highest to the lowest classes, and the nervous system and organs of the senses are treated of in the same descending order. The various organs connected with digestion, circulation, and respiration, the structure of the secreting and excreting organs, the structure and development of the generative organs, and the various modes of reproduction, are examined in all the classes of the animal kingdom.

The physiological details connected with the structure and development of the different systems of organs, and the applications of the facts of comparative anatomy to the structure and physiology of man, and to zoology, geology, and other sciences, are pointed out while demonstrating the various forms of internal organization presented by the inferior animals.

A second course of comparative anatomy will commence on the 1st of January, 1833, and will continue to the 1st of April.

*Medical Jurisprudence*; Professors, Dr. Thompson, and A. Amos, Esq. Professor of English Law. Medical part, Wednesday and Friday, four to five; legal part, Wednesday, half past eight to half past nine. Fee 4*l.* 10*s.*

This subject is now prescribed as a branch of medical education by the regulations of the Society of Apothecaries.

In Dr. Thompson's part of the course the medical and toxicological departments of the subject will be fully treated; and the application of tests, and the various manipulations for the discovery of poisons, will be rendered familiar to the student: whilst the physiological effects of poisons on the animal system, and the treatment of the symptoms induced by them, with the appearances which they leave on the body, when they prove fatal, will be indicated.

In the legal part, Mr. Amos's lectures will commence early in November; and they will be delivered occasionally, on Wednesday evenings, at half-past eight o'clock. The object of this part of the course will be to point out the description of medical information required in different judicial investigations, and to show, by examples, from actual trials, the proper conduct to be adopted by medical men under various circumstances,



with a view to the admissibility and value of the testimony that may be expected from them. It will be endeavoured to give the student as practical a notion as possible of the situations in which he may be placed, whether in respect of the receiving or the preparing of medical evidence, or afterwards of communicating it in the presence of a court of justice.

*Botany*; Professor Lindley. The course for the medical school will commence early in October, and will continue for about six weeks four times a week; after which there will be a suspension of the lectures till the 1st of April, when they will be resumed for six weeks more.

The autumn course will consist of botanical demonstrations, and an explanation of the principles by which the properties and internal organization of plants are to be judged of by their external characters. The spring course will be occupied in considering the physiology and comparative anatomy of vegetation, and will comprehend the application of these branches of science to agriculture, horticulture, and systematic arrangement.

Payment to the University, 3*l.* Perpetual, 6*l.*

The course is subdivided in this manner in order to enable the students in the medical school to complete their course of botany along with the medical classes, and to meet the regulations of the society of apothecaries, and those under which the University diploma is granted. But it would be highly to the advantage of students if they were to extend their attendance to a second spring course, terminating in the end of June. Although it answers nominally to that of the autumn, yet the subjects employed in illustration will be so different, that the student will not only have a second opportunity of gaining a practical knowledge of botany, but may do so upon new grounds.

Payment to the University for the autumn and spring courses, 4*l.*

The lectures are abundantly supplied with specimens, and are illustrated by drawings, and the occasional use of the microscope.

#### DISPENSARY ATTENDANCE.

The Council have established a dispensary in George-street, Euston-square, which is attended by four of the medical officers of the University. The method of investigating and prescribing for diseases is explained and illustrated, and the pupils have opportunities of attending patients at their own houses, and of becoming practically acquainted with the management of cases, under the superintendence of their teachers. Fee for twelve months' attendance, 6*l.* 6*s.* Surgeon in ordinary, J. Hogg, M.D.

So soon, however, as the hospital which the Council is occupied in founding is opened, the dispensary will merge in the hospital.

Dr. Thomson delivers clinical lectures at the Dispensary, which students entered there

may attend without paying an additional fee.

The Museum of Anatomy, and a Medical and General Library, are open to the medical students every day from nine in the morning till nine in the evening.

The Council give a certificate of proficiency, which, in the medical faculty, is called "The Diploma of Master of Medicine and Surgery in the University of London," under conditions which may be learnt at the office.

*Veterinary Medicine and Surgery*; Lecturer, William Youatt, Esq. These lectures commence on the 1st of November, and will be continued until the 1st of July, with a division at the end of February. Monday and Friday from six to seven; Tuesday and Thursday, from half-past four to half-past five. Fee for the whole course, 5*l.*; or, for the first division, 3*l.*; second division, 2*l.* Perpetual, 7*l.*

In these lectures the structure of the horse, the ox, the sheep, and the dog, will be described, with an especial relation to their usefulness; the diseases to which they are liable, the nature and causes of those diseases, and the medical and general treatment of all domesticated animals, will be taught. To the medical student these lectures will show the difference of disease as depending on difference in the structure of animals, and the greater difference in the treatment of the same disease, and the effects of the same medicine. To the agriculturist they will unfold the principles on which the usefulness and health of the horse and cattle depend, and they will prepare the veterinary pupil for the practice of his profession. The whole will be illustrated by an extensive veterinary museum.

(By order of the Council.)

THOMAS COATES, Secretary.

July, 1832.

#### KING'S COLLEGE, LONDON.

The medical classes in King's College open on the 1st of October, and the session closes early in May.

The session is divided into two terms, of which the second begins on the 21st of Jan.

Students of medicine and surgery have the option either of attending one or more courses of lectures, as occasional students; or of entering upon a complete course of professional instruction as King's College medical students.

Terms of attendance upon the lectures for occasional students.

*Anatomy, Physiology, and Morbid Anatomy*, by Herbert Mayo, F.R.S. surgeon to the Middlesex Hospital. First course, 5*l.* 5*s.*; second course, 4*l.* 4*s.*; third course, 3*l.* 3*s.* Perpetual, 10*l.* 10*s.*

*Anatomical Demonstrations*, by Richard Partridge, Esq. Every course, 3*l.* 3*s.* Perpetual, 10*l.* 10*s.*

*Botany*, by Gilbert Burnett, Esq. First course, 2*l.* 2*s.*; second course, 2*l.* 2*s.* Perpetual, 3*l.* 3*s.*

*Chemistry*, by J. F. Daniell, F.R.S. First course, 4*l.* 4*s.*; second course, 3*l.* 3*s.*; third course, 3*l.* 3*s.* Perpetual, 8*l.* 8*s.*

*Materia Medica and Therapeutics*, by Bisset Hawkins, M.D. First course, 3*l.* 3*s.*; second course, 2*l.* 2*s.*; third course, 2*l.* 2*s.* Perpetual 6*l.* 6*s.*

*Medicine, Principles and Practice of*, by Francis Hawkins, M.D., physician to the Middlesex Hospital. First course, 3*l.* 3*s.*; second course, 2*l.* 2*s.*; third course, 2*l.* 2*s.* Perpetual, 6*l.* 6*s.*

*Medicine, Forensic*, by Thomas Watson, M.D., physician to the Middlesex Hospital. First course, 3*l.* 3*s.*; second course, 2*l.* 2*s.*; third course, 2*l.* 2*s.*; fourth course, 2*l.* 2*s.* Perpetual, 4*l.* 4*s.*

*Midwifery and Diseases of Women and Children*, by Robert Ferguson, M.D. First course, 3*l.* 3*s.*; second course, 2*l.* 2*s.*; third course, 2*l.* 2*s.*; fourth course, 2*l.* 2*s.* Perpetual, 6*l.* 6*s.*

*Surgery, Principles and Practice of*, by J. H. Green, F.R.S., surgeon to St. Thomas's Hospital. First course, 4*l.* 4*s.*; second course, 3*l.* 3*s.* Perpetual, 8*l.* 8*s.*

*Terms of attendance for King's College Medical Students.*—The terms of attendance upon the course of study required of King's College medical students are, to those nominated by a proprietor, 52*l.* 10*s.*; to those not so nominated, 56*l.* 14*s.* Half of the payment is to be made at the commencement of the first term; the remainder at the commencement of the following term.

Students may begin their attendance either in the October or January term.

The demonstrator of anatomy is present in the dissecting room daily, from eleven o'clock till three.

W. OTTER, Principal.

#### ST. BARTHOLOMEW'S HOSPITAL.

##### LECTURES.

*Medicine*, by Clement Hue, M.D., Fellow of the Royal College of Physicians, and Physician to St. Bartholomew's and the Foundling Hospitals; on Tuesdays, Thursdays, and Saturdays, at ten o'clock in the morning. Terms—One course, four guineas; two courses, six guineas; perpetual, seven guineas.

*Clinical Lectures on Medicine*, by Clement Hue, M.D.

*Surgery*, by William Lawrence, F.R.S., Surgeon to the Hospital; on Mondays, Wednesdays, and Fridays, at seven o'clock in the evening. Terms—One course, five guineas; unlimited, eight guineas.

*Clinical Lectures on Surgery* (gratuitously), by Henry Earle, F.R.S., Surgeon to the Hospital.

*Chemistry*, by Clement Hue, M.D., on Mondays, Wednesdays, and Fridays, at ten

o'clock in the morning. Terms—One course, four guineas; two courses, seven guineas; perpetual, eight guineas.

*Materia Medica and Pharmacy*, by Clement Hue, M.D., on Tuesdays, Wednesdays, and Fridays, at a quarter past eleven in the morning. Terms—One course, two guineas; two courses, three guineas; perpetual, four guineas.

N.B. Gentlemen entering as perpetual pupils to both the lectures on medicine and chemistry, are considered as perpetual also to materia medica and clinical lectures.

*Anatomy, Physiology, and Morbid Anatomy*, by Edward Stanley, F.R.S., Assistant Surgeon to the Hospital, daily, at half-past two o'clock. Terms—First course, five guineas; second course, four guineas; third course, three guineas; unlimited, ten guineas.

*Anatomical Demonstrations and Superintendence of Practicual Anatomy*, by Mr. Skey, Assistant Surgeon to the Hospital, and Mr. Wormald. Terms—One course, three guineas; unlimited, ten guineas. The demonstrations daily, at nine in the morning.

*Midwifery, and the Diseases of Women and Children*, by John T. Conquest, M.D. F.L.S., on Tuesdays, Thursdays, and Saturdays, at seven o'clock in the evening. Terms—One course, three guineas; two courses, five guineas; perpetual, eight guineas.

*Forensic Medicine*, by George Leith Roupell, M.D., Fellow of the Royal College of Physicians, and Physician to the Foundling and Seamen's Hospitals, and George Burrows, M.D., Fellow of Caius College, Cambridge, and Candidate of the Royal College of Physicians, London; on Mondays and Thursdays, at six o'clock in the evening. Terms—One course, three guineas; perpetual, four guineas.

*Botany*, by Frederic John Farre, M.A., on Mondays and Thursdays, at eleven o'clock in the morning. Terms—One course, two guineas; perpetual, three guineas. Herborizing excursions during the summer.

Morbid Inspections, as opportunities occur, at one o'clock.

The Museum of the Hospital is open every day, for the use of the students.

#### GUY'S HOSPITAL.

*Theory and Practice of Medicine*; Dr. Bright and Dr. Addison, Mondays, Wednesdays, and Fridays, at half-past three o'clock. First course, 4*l.* 4*s.*; second course, 3*l.* 3*s.*; third, and to be perpetual, 2*l.* 2*s.* Two courses, paid for at once, 6*l.* 6*s.*; to be perpetual, 3*l.* 3*s.*; three courses, ditto, 7*l.* 7*s.*; to be perpetual, 2*l.* 2*s.* Perpetual, at one payment, 8*l.* 8*s.*

*Materia Medica and Therapeutics*; Dr. Addison, Tuesdays and Fridays, at seven in the evening; and Wednesday mornings, at half-past nine. First course, 3*l.* 3*s.*; second

course, and to be perpetual, 2*l.* 2*s.* Perpetual, at one payment, 4*l.* 4*s.*

*Morbid Anatomy*; Dr. Hodgkin, Curator of the Museum; demonstrations at one o'clock. Lectures, perpetual, 2*l.* 2*s.*

*Clinical Lectures* will be given by the physicians.

*Midwifery and Diseases of Women and Children*; Dr. Blundell, daily, at a quarter before eight in the morning. By single courses, each 3*l.* 3*s.*; two courses, paid for at once, 5*l.* 5*s.*; third, fourth, and fifth, each 2*l.* 2*s.* Perpetual, after four single courses, or at one payment, 10*l.* 10*s.*

*Physiology or Laws of the Animal Economy*; Dr. Blundell, Mondays and Wednesdays, at 6½ in the evening. Single course, 2*l.* 2*s.*; second course, and to be perpetual, 2*l.* 2*s.*; perpetual, at one payment, 3*l.* 3*s.* Pupils of two or more courses of midwifery become perpetual to this by entering for one course.

*Botany and Entomology*; Mr. C. Johnson, Thursdays, at half-past three, Tuesdays and Fridays, at six. Perpetual, 2*l.* 2*s.*

*Principles and Practice of Chemistry*; Mr. Arthur Aikin and Mr. Alexander Barry, Tuesdays, Thursdays, and Saturdays, at a quarter before ten o'clock. First course, 4*l.* 4*s.*; second course, 3*l.* 3*s.*, third, and to be perpetual, 2*l.* 2*s.*; two courses paid for at once, 6*l.* 6*s.*; to be perpetual, 3*l.* 3*s.*; three courses ditto, 7*l.* 7*s.*; to be perpetual, 2*l.* 2*s.*; perpetual, at one payment, 8*l.* 8*s.*

*Medical Jurisprudence*; Mr. A. Taylor, Tuesdays and Saturdays, at half past three. Single course, 3*l.* 3*s.*; perpetual, 4*l.* 4*s.*

*Physicians' Pupils*; perpetual, 24*l.* 4*s.*; one year, 17*l.* 18*s.*; nine months, 12*l.* 13*s.*

*Anatomy and Operations of Surgery*; Mr. Bransby Cooper, daily, at two o'clock. The lectures on the anatomy and diseases of the teeth will be given by Mr. Thomas Bell.

#### LECTURES.

One course, 5*l.* 5*s.*; two courses, at one payment, 9*l.* 9*s.*; a third course, and to be perpetual, 2*l.* 2*s.*; perpetual, at one payment, 10*l.* 10*s.*

#### DISSECTIONS.

Single courses, each 3*l.* 3*s.*; perpetual, after four single courses, or at one payment, 10*l.* 10*s.*

*Demonstrators*; Mr. Edward Cock and Mr. Hilton.

*Principles, Practice, and Operations of Surgery*; Mr. Key and Mr. Morgan, Tuesdays, Thursdays, and Fridays, at eight in the evening. Single course (extending from October to April inclusive), 3*l.* 3*s.*; perpetual, after two single courses, or at one payment, 5*l.* 5*s.*

*Comparative Anatomy*; Mr. Thomas Bell, Saturdays, at six. Perpetual, 2*l.* 2*s.*

*Eye Infirmary*; Mr. Morgan, clinical lectures on Saturdays, at twelve.

Sir Astley Cooper, Bart. Consulting Surgeon.

*Clinical Instructions* will be given by the surgeons, and on the diseases of women by Dr. Blundell, assisted by Mr. Ashwell.

*Surgeon's Dresser*; one year, 5*l.* 2*s.*; six months, 32*l.* 12*s.*

*Surgeon's Pupil*; twelve months, 26*l.* 6*s.*; six months, 20*l.*; a second entry within two months, 6*l.* 11*s.* Pupils entering to the surgical practice of Guy's Hospital, are allowed to attend that of St. Thomas's.

*Experimental Philosophy*; Mr. Alexander Barry, Wednesdays, at five, and Thursdays, at six in the evening. Single course, 2*l.* 2*s.*; perpetual, 3*l.* 3*s.*

Pupils will be permitted the use of the library, reading room, and botanic garden, subject to regulations.

N. B. The above lectures are so arranged, as not to interfere with each other, nor with the physician's and surgeon's practice.

Mr. Stoker, Apothecary to Guy's Hospital, is authorized to enter to any of these lectures, &c.

Catalogues of the museum may be had by the pupils at the Steward's Office.

No certificate will be given for the Autumnal courses before January, nor for the Spring courses before May.

### ST. THOMAS'S HOSPITAL.

#### LECTURES.

*Theory and Practice of Medicine*; Dr. Williams; Tuesdays, Thursdays, and Saturdays, at eleven o'clock. First course, 3*l.* 3*s.*; second course, 2*l.* 2*s.*; perpetual, 6*l.* 6*s.*

*Principles and Practice of General and Pharmaceutical Chemistry*; Mr. R. Phillips, F.R.S. Mondays, Wednesdays, and Fridays, at eleven o'clock. First course, 4*l.* 4*s.*; second course, 2*l.* 2*s.*; perpetual, 6*l.* 6*s.*

*Materia Medica and Therapeutics*; Dr. Burton; Mondays, Wednesdays, and Fridays, at four o'clock. First course, 3*l.* 3*s.*; second course, 2*l.* 2*s.*; perpetual, 4*l.* 4*s.*

N. B. The specimens of the materia medica will be open for the inspection of his pupils.

*Midwifery and the Diseases of Women and Children*; Dr. Ashburner and Dr. Rigby; Tuesdays, Thursdays, and Saturdays, at four o'clock. First course, 3*l.* 3*s.*; second course, 2*l.* 2*s.*; perpetual, 5*l.* 5*s.*; labors free of expense.

*Medical Jurisprudence*; Dr. Lister and Mr. R. Phillips, F.R.S. First course, ; perpetual,

*Botany*. First course, 1*l.* 1*s.*; perpetual, 2*l.* 2*s.*

*Medical Practice*; physician's pupil, two years, 24*l.* 3*s.*; one year, 15*l.* 15*s.* The physicians make their visits daily, at one o'clock; Dr. Williams on Mondays and Thursdays; Dr. Elliotson on Tuesdays and Fridays; Dr. Roots on Wednesdays and Saturdays; Dr. Burton sees the out-patients on Thursdays and Saturdays at eleven. Clinical lectures

will be delivered to the physicians' pupils, by Dr. Elliotson and Dr. Roots.

N.B. The Apothecaries' Hall require candidates to attend the following courses of lectures:—

*Chemistry*, two courses, each course consisting of not less than forty-five lectures.

*Materia Medica and Therapeutics*, two courses, each course consisting of not less than forty-five lectures.

*Anatomy and Physiology*, } Two courses,  
*Anatomical Demonstrations*, }  
of the same extent as required by the Royal College of Surgeons, of London.

*Principles and Practice of Medicine*, two courses, each course consisting of not less than forty-five lectures, to be attended subsequently to the first course of lectures on chemistry, materia medica, and anatomy and physiology.

*Botany*, one course.

*Midwifery and the Diseases of Women and Children*, two courses; *Forensic Medicine*, one course; to be attended during the second year.

And twelve months, at least, the Physicians' Practice at a hospital, (containing not less than sixty beds), such attendance to commence the second year.

Students are moreover recommended diligently to avail themselves of instruction in *Morbid Anatomy*, and to attend *Clinical Lectures*.

*Anatomy, Physiology, and Operations of Surgery*; Mr. Tyrrell and Mr. John F. South; daily, at half-past nine o'clock. Lectures; first course, 3*l.* 5*s.*; second course, 4*l.* 4*s.*; perpetual, 10*l.* 10*s.* Dissections and Demonstrations; first course, 5*l.* 5*s.*; second course, 4*l.* 4*s.*; perpetual, 10*l.* 10*s.*

*Anatomical Demonstrations*; Mr. S. Solly; daily.

*Principles and Practice of Surgery*; Mr. Tyrrell; Mondays, Wednesdays, and Fridays, at eight in the evening. Single course, 3*l.* 3*s.*; perpetual, 5*l.* 5*s.*

*Surgical Practice*; dresser, one year, 5*l.* 2*s.*; six months, 3*l.* 12*s.*; surgeon's pupil, one year, 26*l.* 6*s.*; six months, 20*l.*; a second entry, if within two months, 6*l.* 12*s.*

The surgeons make their visits daily; Mr. Travers on Mondays and Thursdays at one o'clock; Mr. Green on Tuesdays and Fridays at one o'clock; Mr. Tyrrell on Wednesdays and Saturdays at half-past eight o'clock. A.M.; Mr. Tyrrell sees the out-patients on Wednesdays at eight o'clock; on Friday operations are performed.

Clinical lectures will be given to the dressers, and surgeons' pupils by Mr. Green and Mr. Tyrrell. Pupils entering to the surgical practice of St. Thomas's Hospital, are allowed to attend that of Guy's.

N.B. The College of Surgeons require candidates to bring proof, 1, of being twenty-two years of age; 2, of having been engaged six years in the acquirement of professional

knowledge; 3, of having studied anatomy and physiology, by attendance on lectures and demonstrations, and by dissections, during two anatomical seasons\*; 4, of having attended at least two courses of lectures on surgery, delivered in two distinct periods or seasons, each course to comprise not less than sixty lectures; 5, of having attended lectures on the practice of physic, on chemistry, and on midwifery during six months, and on botany and materia medica during three months; 6, of having attended during twelve months the surgical practice of a recognised hospital in London, Dublin, Edinburgh, Glasgow, or Aberdeen; or for six months in any one of such hospitals, and twelve months in any recognised provincial hospital.

Mr. Whitfield, apothecary to St. Thomas's Hospital, is empowered to enter gentlemen who may wish to attend any of the above lectures, or the practice of the hospital.

*Library.* Gentlemen who enter to the practice or the lectures at this hospital are allowed the use of the library and of the reading room, so long as they continue attending as pupils, on the payment of one guinea.

## LONDON HOSPITAL.

### LECTURES.

*Principles and Practice of Medicine*; Dr. Billing and Dr. Davis. Winter division, Tuesdays, Thursdays and Fridays, at half-past 3; spring division, Tuesdays, Thursdays and Saturdays, at eight, P. M. One course, 4*l.* 4*s.*; two courses, 6*l.* 6*s.* Perpetual, 7*l.* 7*s.*

*Materia Medica and Therapeutics*: Dr. Cobb; Wednesdays and Fridays, at nine A. M. One course, 3*l.* 3*s.*; two courses, 4*l.* 4*s.* Perpetual, 4*l.* 4*s.*

*Midwifery, and Diseases of Women and Children*; Dr. F. H. Ramsbotham; Tuesdays, Thursdays and Saturdays, at ten A. M. One course, 3*l.* 3*s.*; two courses, 5*l.* 5*s.* Perpetual, 7*l.* 7*s.*

*Chemistry, General and Pharmaceutic*; Mr. Pereira; Mondays, Wednesdays and Fridays, at ten A. M. One course, 4*l.* 4*s.*; two courses, 7*l.* 7*s.* Perpetual, 8*l.* 8*s.*

*Medical Jurisprudence*; Dr. Cobb, Dr. F. H. Ramsbotham, and Mr. Pereira; Saturdays at half-past three. One course, 3*l.* 3*s.*; two courses, 4*l.* 4*s.* Perpetual, 4*l.* 4*s.*

\* An anatomical season is understood to extend from October to April inclusive, and to comprise at least 140 lectures on anatomy and physiology, occupying not less than one hour each, given on separate days; and at least 100 demonstrations of the like duration, given in a similar manner, exclusive of dissections, of which distinct certificates are required.

*Anatomy, Physiology & Operations of Surgery*; Mr. Luke, Mr. Hamilton, and Mr. Adams; daily, at half-past two. One course, 5*l.* 5*s.*; two courses, 9*l.* 9*s.* Perpetual, 10*l.* 10*s.*

*Surgery, Principles & Practice of*; Mr. John Scott; Mondays and Wednesdays, at seven P.M. One course, 3*l.* 3*s.*; two courses, 5*l.* 5*s.*

*Anatomy, Practical, with Demonstrations*; Mr. Hamilton and Mr. Adams; daily, at a quarter past eleven. One course, 3*l.* 3*s.*; two courses, 6*l.* 6*s.* Perpetual, 10*l.* 10*s.*

One of the demonstrators daily attends in the dissecting room from eleven to four.

*Botany, Medical and General*; Mr. Pereira. One course, 2*l.* 2*s.*; two courses, 3*l.* 3*s.* Perpetual, 3*l.* 3*s.*

General fee for attendance upon all the above lectures, qualifying for Royal College of Surgeons, and Apothecaries' Hall, 50*l.*

*Hospital Practice*; Physicians, Dr. Frampton, Dr. Billing, Dr. Gordon; surgeons, Sir William Blizard, Mr. Andrews, Mr. John Scott.

Physicians' pupil; twelve months, 10*l.* 10*s.*; perpetual, 21*l.*; apothecary's fee, 1*l.* 1*s.*;—surgeon's pupil; twelve months, 21*l.*; ditto as dressing pupil, 31*l.* 10*s.*; six ditto ditto, 21*l.*; library, 1*l.* 1*s.*

*Clinical Lectures* by the physicians and surgeons.

*Lectures on Natural Philosophy* by Mr. C. F. Partington, F.L.S. &c. on Tuesday evenings, at six o'clock.

#### ST. GEORGE'S HOSPITAL.

The following courses of lectures, which are not restricted to the pupils of the hospital, will be given during the winter season, commencing October 1st.

*Theory and Practice of Physic*, by Dr. Chambers and Dr. Macleod; Monday, Wednesday, and Friday, at half-past eleven. Each course, separately, 3*l.* 3*s.*; two courses, at one payment, 5*l.* 5*s.*; perpetual, 6*l.* 6*s.*

*Theory and Practice of Surgery*, by Mr. Cæsar Hawkins and Mr. G. Babington; Monday, Wednesday, and Friday, at eight in the evening. Each course, 3*l.* 3*s.*; perpetual, 5*l.* 5*s.*

*Materia Medica*, by Dr. Macleod and Dr. Seymour; on Tuesday, Thursday, and Saturday, at half-past eleven. Each course, separately, 3*l.* 3*s.*; two courses, at one payment, 5*l.* 5*s.*; perpetual, 6*l.* 6*s.*

*Midwifery and the Diseases of Women and Children*, by Mr. Stone, conjointly with Dr. Henry Davies; on Monday, Wednesday, and Friday, at nine. Each course, 3*l.* 3*s.*; perpetual, 5*l.* 5*s.*

*Medical Jurisprudence*, by Dr. Seymour and Mr. Cæsar Hawkins; on Tuesday and Thursday, at eight in the evening, in the middle of the season. Each course, 3*l.* 3*s.*; perpetual, 4*l.* 4*s.*

*Botany*, by Dr. Dickson; on Monday, Tuesday, Wednesday, Thursday, and Friday, at a quarter to four, in the early part of the season, and in the spring. One course 3*l.* 3*s.*; perpetual, 4*l.* 4*s.*

Physicians' pupils admitted to attend the practice of the physicians; for nine months, to pay 12*l.* 12*s.*; for one year, 16*l.* 16*s.*; perpetual pupils, 25*l.* 4*s.* Every pupil on admission is to pay one guinea to the apothecary. Clinical lectures are given gratuitously to the pupils of the hospital by Dr. Hewett and Dr. Seymour; and lectures on pathology by Dr. Wilson, of which notice will be given.

Surgeons' pupils admitted to attend the practice of the surgeons; for six months, to pay 15*l.* 15*s.*; for one year, 21*l.*; perpetual, 52*l.* 10*s.*; pupils entering for twelve months are allowed to dress the patients for three months without additional fee; the perpetual pupils are entitled to dress twice, and also to be House Surgeons, when properly qualified for the office. Clinical lectures are given gratuitously to the pupils of the hospital, by Mr. Brodie, Mr. Hawkins, and Mr. Babington, of which notice will be given. Reception of patients on Wednesdays; operations on Thursdays at one o'clock. The physicians and surgeons attend almost daily, at half-past twelve o'clock.

#### THEATRE OF ANATOMY AND MEDICINE,

*Webb Street, Maze Pond, Borough.*

The following courses of lectures commence on Monday, October 1st, 1832.

*Anatomy and Physiology*; Mr. Grainger and Mr. Pilcher; daily, at half-past two o'clock.

Mr. Grainger will deliver the introductory lecture at a quarter past eleven o'clock on Monday, October 1st.

*Demonstrations on Anatomy*, Mondays, Tuesdays, Thursdays, and Fridays, at eleven, A.M.; Mr. C. Millard. Lectures and demonstrations; single course, 5*l.* 5*s.*; two courses, 8*l.* 8*s.*; perpetual, 10*l.* 10*s.*; dissections as usual by the lecturers and demonstrator.

*Principles and Practice of Surgery*; Mr. Grainger and Mr. Pilcher; Mondays, Wednesdays, and Fridays, at half-past seven in the evening.

Mr. Pilcher will deliver the introductory lecture on Monday, October 1st. One course, 3*l.* 3*s.*; perpetual, 5*l.* 5*s.*

*Chemistry*; Mr. Cooper; Mondays, Wednesdays, and Fridays, at a quarter before ten in the morning. Single course, 4*l.* 4*s.*; second and every succeeding course, 2*l.* 2*s.*; two courses entered together, 5*l.* 5*s.*; perpetual, 6*l.* 6*s.*

*Principles and Practice of Midwifery, and the Diseases of Women and Children*; Dr. Robert Lee, F.R.S.; Tuesdays, Thursdays, and Saturdays, at five o'clock in the afternoon.

The introductory lecture will be delivered on Tuesday the 2d of October. Single course, 3*l.* 3*s.*; two courses entered together, 5*l.* 5*s.*; perpetual, 6*l.* 6*s.*

The great advantage to be derived from these lectures will be the extensive field of practical instruction which Dr. Lee has it in his power to lay open to his students, and the very frequent opportunities each of them will have of attending cases under his own superintendence.

The museum will be open several hours every day for the admission of students.

*Theory and Practice of Medicine*; Dr. Whiting; Mondays, Wednesdays, and Fridays, at a quarter past five o'clock in the afternoon. The introductory lecture will be delivered on Monday, October 1st. One course, 4*l.* 4*s.*; second course, 3*l.* 3*s.*; perpetual, 6*l.* 6*s.*

*Materia Medica, Pharmacy, and Therapeutics*; Dr. Whiting and Mr. Everitt; Tuesdays, Thursdays, and Saturdays, at a quarter before ten in the morning.

The introductory lecture will be delivered on Tuesday, October 2d. One course, 3*l.* 3*s.*; perpetual, 4*l.* 4*s.*

The lectures on materia medica, &c. will be illustrated by chemical experiments, by specimens of drugs, and by dried plants and botanical plates. A cabinet is likewise fitted up with good and bad specimens of every medicine now in use, which will be open to the inspection of those students who attend these lectures.

*Botany*; Dr. Robert Dickson, F. L. S.; Tuesdays, Wednesdays, Thursdays, Fridays, and Saturdays, at a quarter before nine, A.M. One course, 3*l.* 3*s.*; perpetual, 4*l.* 4*s.* The introductory lecture will be delivered on Tuesday, October 2d.

*Medical Jurisprudence*; Dr. Southwood Smith and Mr. Cooper; Tuesdays and Thursdays, at seven in the evening. One course, 3*l.* 3*s.*; two courses, 4*l.* 4*s.*; perpetual 5*l.* 5*s.*

Periodical examinations will be given by the different lecturers in their various departments.

N.B. The regulations of the Court of Examiners of the Apothecaries' Hall require candidates for examination to have attended the following lectures:—

*Chemistry*, two courses.

*Materia Medica and Therapeutics*, two courses.

*Anatomy and Physiology*, two courses.

*Anatomical Demonstrations*, two courses.

*Principles and Practice of Medicine*, two courses. The first course on this subject, to be attended subsequently to the termination of the first course of lectures on chemistry, materia medica, and anatomy and physiology.

*Botany*, one course.

*Midwifery and the Diseases of Women and Children*, two courses; to be attended during the second year.

*Forensic Medicine*, one course; to be at-

tended during the second year. Students are moreover recommended diligently to avail themselves of instruction in morbid anatomy.

N.B. The regulations of the Council of the Royal College of Surgeons require candidates for examination to have attended the following lectures:—

*Anatomy and Demonstrations*, during two anatomical seasons.

An anatomical season is understood to extend from October to April inclusive.

*Principles and Practice of Surgery*, two courses.

*Practice of Physic*, two courses.

*Chemistry*, two courses.

*Midwifery*, two courses.

*Botany*, one course.

*Materia Medica*, one course.

The candidate must also have attended during twelve months the surgical practice of a recognized hospital in London, Dublin, Edinburgh, Glasgow, or Aberdeen; or for six months in any one of such hospitals, and twelve months in any properly constituted provincial hospital, acknowledged by the Council as competent for the purposes of instruction.

It is earnestly recommended that candidates shall have studied anatomy, by attendance on lectures and demonstrations, and by dissections, for one anatomical season prior to their attendance on the surgical practice of an hospital.

The candidate must also have attended for twelve months, at least, the physicians' practice at an hospital containing not less than sixty beds, and where a course of clinical lectures is given; or for fifteen months at an hospital wherein clinical lectures are not given; or for fifteen months at a dispensary connected with some medical school recognized by the Court. The whole of such attendance to be subsequent to the first year of attendance on lectures.

For further information apply at the Theatre; to Mr. Grainger, at Mr. Highley's Medical Library, adjoining the Theatre; Mr. Pilcher, 5, Union-street, Borough; Mr. Cooper, 9, Paradise-street, Lambeth; Dr. Lee, 14, Golden-square; Dr. Whiting, 163, High-street, Borough, or at the Rectory House, Newington Butts; Mr. Everitt, No. 1, Dean-street, Borough; Dr. Southwood Smith, No. 36, New Broad-street; Dr. Dickson, No. 47, Finsbury-square; Mr. Millard, 28, Dean-street, Borough; or Mr. Highley, Medical Bookseller, No. 32, Fleet-street, opposite St. Dunstan's Church.

\* \* Mr. Highley is authorized to enter gentlemen to the above lectures.

#### WESTMINSTER HOSPITAL,

##### MEDICAL PRACTICE.

During six months, 10*l.* 10*s.*; nine months, 12*l.* 12*s.*; twelve months, 15*l.* 15*s.*; unlimited attendance, 21*l.*

A *Clinical Lecture* will be given twice a week during the winter months.

On the 1st of November, and 1st of May, in each year, a clinical assistant to the physicians will be elected, by examination, for the ensuing six months; for this office, which affords many advantages, any pupil may become a candidate after he has diligently attended the physicians' practice for three months. If a physician's pupil should not offer, or be properly qualified, a preference will be given to the surgeons' pupil of the hospital.

### MIDDLESEX HOSPITAL.

#### SURGEONS' DRESSERS AND PUPILS.

*Dresser* for twelve months, 31*l.* 10*s.*; for six months, 21*l.*

*Pupil* for twelve months, 21*l.*; for six months, 15*l.* 15*s.*; for three months, 10*l.* 10*s.*

From the dressers the house surgeon is elected, agreeably to his date of entrance.

A pupil may be allowed three months' dressings, during the time of his pupilage, by paying 10*l.* 10*s.*

#### MEDICAL PRACTICE.

During three months, 6*l.* 6*s.*; six months, 10*l.* 10*s.*; nine months, 12*l.* 12*s.*; twelve months, 15*l.* 15*s.*; unlimited attendance, 22*l.* 1*s.* Apothecary's fee, 1*l.* 1*s.*

*Clinical Lectures* are delivered gratuitously to the physicians' pupils.

### ALDRSGATE STREET MEDICAL SCHOOL.

*Anatomy and Physiology*, by Robert B. Todd, M. A. A lecture will be delivered daily at half-past two o'clock. A single course, 3*l.* 3*s.*; two courses, 5*l.* 5*s.*; perpetual, 6*l.* 6*s.*

*Demonstrations and Dissections*, by C. Brooke, M. B. and Mr. J. H. Walsh. A demonstration will be delivered daily, except Wednesdays, at nine, A. M. A single course, 3*l.* 3*s.*; two courses, 4*l.* 4*s.*; perpetual, 6*l.* 6*s.* Perpetual entry to the anatomical lectures, demonstrations, and dissections, 10*l.* 10*s.*

*Principles and Practice of Medicine*, by John Burne, M. D. Physician to the Public Dispensary, Chancery-lane, Tuesdays, Thursdays, and Saturdays, at eight o'clock in the evening. A single course, 3*l.* 3*s.*; two courses, 5*l.* 5*s.*; perpetual, 6*l.* 6*s.*

*Materia Medica and Therapeutics*, by Robert Dixon, M. D. F. L. S. Mondays, Wednesdays, and Fridays, at eleven, A. M. A single course, 3*l.* 3*s.*; perpetual, 4*l.* 4*s.*

*Chemistry*, by Richard Phillips, F. R. S. L. and E. Tuesdays, Thursdays, and Saturdays, at eleven, A. M. A single course, 4*l.* 4*s.*; two courses, 5*l.* 5*s.*; perpetual, 6*l.* 6*s.*

*Forensic Medicine*, by Edmund Clark, M. D. F. L. S. and William Cummin, M. D. Wednesdays, at nine, A. M. A single course, 2*l.* 2*s.*; perpetual, 3*l.* 3*s.*

*Midwifery and the Diseases of Women and Children*, by F. H. Ramsbotham, M. D. Physician Accoucheur to the Royal Maternity Charity, &c. Tuesdays, Thursdays, and Saturdays, at a quarter before seven, P. M. A single course, 3*l.* 3*s.*; two courses, 5*l.* 5*s.*; perpetual, 6*l.* 6*s.* Pupils, when duly qualified, will have ample opportunities of attending labours, free of expense.

*Botany*, by Robert Dickson, M. D. F. L. S. Mondays, Tuesdays, Wednesdays, Thursdays, and Fridays, at six, P. M. A single course, 3*l.* 3*s.*; perpetual, 4*l.* 4*s.*

Mr. Brooke will deliver a course of lectures, illustrated by experiments, on those branches of natural philosophy which are applicable to anatomy and physiology, free to the pupils of the school, to all others, 1*l.* 1*s.* for the course.

Perpetual entry to all the above lectures, 37*l.* 10*s.*

Perpetual entry to anatomy and dissection, materia medica, and chemistry, 19*l.* 10*s.*

Perpetual entry to medicine, materia medica, and chemistry, 14*l.*

N. B. The Apothecaries' Hall require candidates to attend the following courses of lectures:—

*Chemistry*; two courses, each course consisting of not less than forty-five lectures.

*Materia Medica and Therapeutics*; two courses; each course consisting of not less than forty-five lectures.

*Anatomy and Physiology*.—*Anatomical Demonstrations*; two courses, of the same extent as required by the Royal College of Surgeons of London.

*Principles and Practice of Medicine*; two courses; each course, consisting of not less than forty-five lectures, to be attended subsequently to the first course of lectures on chemistry, materia medica, and anatomy and physiology.

*Botany*; one course.

*Midwifery and the Diseases of Women and Children*; two courses, to be attended during the second year.

*Forensic Medicine*; one course, to be attended during the second year.

The candidate must also have attended for twelve months, at least, the physician's practice at an hospital containing not less than 60 beds, and where a course of clinical lectures is given; or for fifteen months at an hospital wherein clinical lectures are not given; or for fifteen months at a dispensary connected with some medical school recognized by the court.\* The whole of such attendance to be subsequent to the first year of attendance on lectures.

\* This is repealed. Attendance on any recognised dispensary will be allowed.—Eps.

N. B. The College of Surgeons require candidates to bring proof,

1. Of being twenty-two years of age.

2. Of having been engaged six years in the acquirement of professional knowledge.

3. Of having studied anatomy and physiology, by attendance on lectures and demonstrations, and by dissections, during two anatomical seasons.

\* \* An anatomical season is understood to extend from October to April inclusive, and to comprise at least 140 lectures on anatomy and physiology, occupying not less than one hour each, given on separate days; and at least 100 demonstrations of the like duration, given in a similar manner; exclusive of dissections, of which distinct certificates are required.

4. Of having attended at least two courses of lectures on surgery, delivered in two distinct periods or seasons; each course to comprise not less than sixty lectures.

5. Of having attended lectures on the practice of physic, on chemistry, and on midwifery, during six months; and on botany and materia medica, during three months.

6. Of having attended during twelve months to the surgical practice of a recognized hospital in London, Dublin, Edinburgh, Glasgow, or Aberdeen; or for six months in any one of such hospitals, and twelve months in any recognized provincial hospital.

nations with the various substances described in the early part of the course.

*Division III.*—Vegetable Chemistry. 1. Chemical physiology of vegetables, 2. Modes of analysis, ultimate and proximate elements. 3. Processes of fermentation, and their products.

*Division IV.*—Chemistry of the Animal Kingdom. 1. General views connected with this department of the science. 2. Composition and properties of the solids and fluids of animals. 3. Products of disease 4. Animal functions.

In the first division of each course, the principles and objects of chemical science, and the general laws of chemical changes, are explained, and the phenomena of attraction, and of light, heat, and electricity developed, and illustrated by numerous experiments.

In the second division, the undecomposed bodies are examined, and the modes of procuring them in a pure form, and of ascertaining their chemical characters, exhibited upon an extended scale.—The lectures on the metals include a succinct account of mineralogy, and of the methods of analyzing and assaying ores.

This part of the course will also contain a full examination of pharmaceutical chemistry; the chemical process of the *pharmacopœia* will be particularly described, and compared with those adopted by the manufacturer.

The third and fourth divisions relate to organic substances. The chemical changes induced by vegetation are here inquired into; the principles of vegetables, the theory of fermentation, and the character of its products are then examined.

The chemical history of animals is the next object of inquiry—it is illustrated by an examination of their component parts, in health and in disease; by an inquiry into the chemistry of animal functions, and into the application of chemical principles to the treatment of diseases.

The application of chemistry to the arts and manufactures, and to economical purposes, are discussed at some length in various parts of the courses; and the most important of them are experimentally exhibited. The various operations of analysis are also shewn and explained.

The admission fee to each course is *four guineas*; or, by paying *eight guineas*, gentlemen are intitled to attend for an unlimited time. Gentlemen, who are in actual attendance at the medical and anatomical schools in London, are admitted to attend two courses of the above lectures, upon the payment of *six guineas*. Life and annual subscribers to the Royal Institution are admitted to the above lectures on payment of *two guineas* for each course; or, by paying *six guineas*, are entitled to attend for an unlimited time.

## THE ROYAL INSTITUTION,

Albemarle Street.

### LECTURES ON CHEMISTRY,

Delivered in the laboratory of the Royal Institution, by William Thomas Brande, F.R.S., and M. Faraday, F.R.S. These lectures commence on the first Tuesday in October, at nine in the morning, and are continued every Tuesday, Thursday, and Saturday. Two courses are given during the season, which begins in October, and terminates in May. The subjects comprehended in the courses are treated of in the following order.

*Division I.*—Of the Powers and Properties of Matter, and the general laws of Chemical Changes. 1. Attraction, crystallization, chemical affinity, laws of combination and decomposition. 2. Heat, its influence as a chemical agent in art and nature. 3. Electricity, its laws and connection with chemical phenomena. 4. Radiant matter.

*Division II.*—Of Undecomposed Substances, and their mutual Combinations. 1. Substances that support combustion: oxygen, chlorine, iodine, fluorine, bromine. 2. Inflammable and acidifiable substances: hydrogen, nitrogen, sulphur, selenium, phosphorus, carbon, boron. 3. Metals, and their combi-



## THEATRE OF ANATOMY,

No. 8, Hatton Garden.

Lectures on *Anatomy and Physiology*, and on the application of these sciences to pathology and surgery, by Mr. Greville Jones. The course will consist of two divisions:—

1. General anatomy, or the analysis of structures, physiology, the principles of pathology, and medical surgery. These lectures will be illustrated by drawings, preparations, &c.

2. Special anatomy, or the analysis of particular regions; with the manual department of surgery, operations, &c. This division will be illustrated by dissections of the recent subject, on which also the surgical operations will be performed.

•• There will be daily examinations on each division of the course, and the lecturer will constantly attend in the dissecting room.

This theatre is situate conveniently for the attendance of students on the practice of St. Bartholomew's Hospital, the Central Dispensary, and the courses of several eminent medical, chemical, and obstetric lecturers.

One course of lectures, 4*l.* 4*s.*; one course of demonstrations, 3*l.* 3*s.*; perpetual, to lectures and demonstrations, and to examinations until the student is qualified to pass the College of Surgeons, 10*l.* 10*s.*

Private instruction is also afforded, and arrangements are made for the reception of a limited number of students in the house; for terms apply to the lecturer.

These lectures are formally acknowledged by the examiners of the College of Surgeons, and of the Apothecaries' Company, whose acknowledgments may be seen, together with several testimonials from very eminent professional men as to the qualifications of the lecturer.

Commencement, Tuesday, October 2, 1832, at half-past two.

## THEATRE OF ANATOMY,

Little Windmill Street, Golden Square.

The Autumnal course to commence October the 1st; Spring course, January the 20th. *Anatomy, Physiology, with Demonstrations and Dissections*; by Mr. E. W. Tuson. Each course, 5*l.* 5*s.*; perpetual, 15*l.* 15*s.*

*The Principles, Practice, and Operations of Surgery*; by Mr. Guthrie. Each course, Clinical lectures on surgery will be delivered occasionally by Mr. Guthrie, at the Westminster Hospital, and on the diseases of the eye, at the Royal Westminster Ophthalmic Hospital.

*Practice of Physic, and Materia Medica*, by Dr. Sigmond. Each course, 3*l.* 3*s.*; perpetual, 8*l.* 8*s.*

*Chemistry*, by Mr. Everitt. Each course,

3*l.* 3*s.*; two courses, 5*l.* 5*s.*; perpetual, 6*l.* 6*s.*

*Midwifery, and the Diseases of Women and Children*, by Mr. Jewell. Each course, 3*l.* 3*s.*; perpetual, 5*l.* 5*s.*

•• This Theatre is situated about a quarter of an hour's walk from St. George's, the Middlesex, and Westminster Hospitals.

## THEATRE OF ANATOMY AND MEDICINE,

No. 18, Giltspur-street, adjoining St. Bartholomew's Hospital.

The winter courses of lectures commence on Monday, October 1st, 1832.

*Theory and Practice of Medicine*, by Dr. Tweedie, Monday, Wednesday, and Friday, at half-past five o'clock in the evening.

*Chemistry*, by Mr. James L. Wheeler, Monday, Wednesday, and Friday, at half-past three o'clock in the afternoon.

*Materia Medica*, by Mr. James L. Wheeler, Tuesday, Thursday, and Saturday, at half-past three o'clock in the afternoon.

*Demonstrations and Dissections*, by Mr. Lowe Wheeler, at eleven o'clock.

*Midwifery*, by Dr. Samuel Millar, Tuesday, Thursday, and Saturday, at seven o'clock in the evening.

Apply to Mr. Wheeler, at the lecture room; Dr. Tweedie, 40, Ely-place; or to Dr. Millar, 3, New Basinghall-street.

## THEATRE OF ANATOMY,

No. 1, Grosvenor-place, adjoining St. George's Hospital.

Two courses of lectures will be delivered during the winter and spring seasons at the above theatre, by James Arthur Wilson, M.D., Fellow of the Royal College of Physicians, and one of the Physicians to St. George's Hospital; and by Mr. Samuel Lane, Member of the Royal College of Surgeons.

The first course will commence on Monday the 1st of October, and will terminate in the middle of January; the second course will commence on the 20th of January, and terminate early in May.

These lectures will embrace a complete system of *Anatomy, Physiology, Pathology, and Surgical Anatomy*.

Further particulars may be obtained by applying to Dr. Wilson, No. 38, Curzon-street, and from Mr. Lane, No. 1, Grosvenor-place. The lectures on *Pathology* will be delivered gratuitously to the medical and surgical pupils of St. George's Hospital.

## HUNTERIAN THEATRE OF ANATOMY,

Great Windmill-street, Haymarket.

Lectures on *Anatomy, Physiology, and Surgical Anatomy*, by Mr. John Gregory

Smith, and Mr. Richard Bushell, formerly House Surgeons of St. George's Hospital.

Two courses of lectures are delivered during the winter and spring seasons; the first course will commence on Tuesday, the 2nd of October.

Mr. Bushell and Mr. Smith will constantly attend in the dissecting room to afford assistance to the students. A demonstration will be given daily, and examinations held twice a week.

*Terms of the Lectures.*—First course, 3*l.* 3*s.* Perpetual, 6*l.* 6*s.*

*Terms of the Dissections and Demonstrations.*—First course, 3*l.* 3*s.* Perpetual, 6*l.* 6*s.*

Further particulars may be known on application to Mr. Smith or Mr. Bushell, at the Anatomical Theatre, Great Windmill-street.

#### LECTURES ON MIDWIFERY AND THE DISEASES OF WOMEN AND CHILDREN.

Dr. Chowne will commence a course of lectures on midwifery and the diseases of women and children, on Monday, the 1st of October.

The lectures will be delivered at his own house, No. 11, South Crescent, Bedford-square, every Monday, Wednesday, and Friday, at from nine to ten o'clock in the morning.

For further particulars apply to George Harrison, No. 4, Great Marlborough-street, Oxford-street.

#### LECTURES ON DISEASES OF THE HEART AND LUNGS.

A course will be given by J. Hope, M.D. F.R.S. physician to the St. Mary-le-bone Infirmary, on Monday the 8th of October, and each succeeding Friday and Monday, at eleven o'clock a.m.

The lectures will be illustrated by experiments, specimens, original drawings, and patients; and it will be an especial object to communicate in a brief space, a practical knowledge of the mode of diagnosis by auscultation, percussion, &c. They will be gratuitous to practitioners.

For particulars apply to Dr. Hope, 13, Lower Seymour-street, or at Lloyd's library, 37, Harley-street.

#### GENERAL DISPENSARY, 36, Aldersgate-street.

The following courses of lectures will be delivered in this institution during the winter season:—

*Materia Medica*, by Mr. Pereira, to commence Monday, October 1, at ten o'clock.

*Practice of Physic*, by Dr. Roberts, on Tuesday, October 2, at eleven o'clock.

*Chemistry*, by Mr. Pereira, on Saturday October 6, at ten o'clock.

*Botany*, by Mr. Pereira, on Tuesday, June 5, at a quarter past eleven.

Prospectuses and particulars may be had on application at the Dispensary.

#### MEDICAL SCHOOL,

Westminster Dispensary, Gerrard-street, Soho.

The following lectures commence Tuesday, October 2nd.

Anatomy, including daily lectures, demonstrations, and dissections, by Mr. Dermott; perpetual, 7*l.* 7*s.*; Medicine, by Dr. Ryan, 5*l.* 5*s.*; Chemistry, *Materia Medica*, and Botany, by Dr. Epps, assisted by Mr. Crump, 6*l.* 6*s.*; Surgery, by Mr. Dermott, 3*l.* 3*s.*; Midwifery, by Dr. Ryan, 5*l.* 5*s.*; Medical Jurisprudence, Dr. Ryan and Mr. Crump, 3*l.* 3*s.*

A good supply of subjects as usual.

For further particulars apply at the Theatre; to Mr. Dermott, 40, Gower-place, Euston-square; Dr. Epps, 11, Berners-street, Oxford-street; or to Dr. Ryan, 61, Hatton Garden; or to Mr. Crump, 6, Bernard-street, Russel-square.

#### MEDICAL SCHOOL, FINSBURY DISPENSARY, 29, St. John-street, West Smithfield.

The following Lectures will be given at this Institution during the ensuing Winter Session, commencing on the 1st of October, 1832.

*Theory and Practice of Medicine*; by J. S. Campbell, M.D. On Mondays and Thursdays, at six o'clock in the evening.—One Course, 3*l.* 3*s.*; Two Courses, 5*l.* 5*s.*; Perpetual, 6*l.* 6*s.*

*Therapeutics and Materia Medica*; by John Thomson, M.D. F.L.S. On Tuesdays and Fridays, at six o'clock in the evening.—One Course 3*l.* 3*s.*; Two Courses, 5*l.* 5*s.*; Perpetual, 6*l.* 6*s.*

*Midwifery and Diseases of Women and Children*; by George S. Lilburn, M.D. On Wednesdays and Saturdays, at six o'clock in the evening.—One Course, 3*l.* 3*s.*; Two Courses, 5*l.* 5*s.*; Perpetual, 6*l.* 6*s.*

Physician's Pupil to the Dispensary Practice, Nine Months, 7*l.* 7*s.*; Twelve Months, 9*l.* 9*s.*; Perpetual, 12*l.* 12*s.*

Clinical Lectures will be given on all important cases.

At this Dispensary upwards of 5000 patients are annually treated, and frequent opportunities will be afforded for prosecuting Morbid Anatomy.

For further particulars apply to the respective Lecturers, or to Mr. Bartlett, at the Dispensary.

## THEORY AND PRACTICE OF PHYSIC AND MATERIA MEDICA.

Dr. Collier, 32, Spring Gardens.

*Theory and Practice of Physic.* One course, 4*l.* 4*s.*; two courses, 6*l.* 6*s.*; Monday, Wednesday, and Friday, at seven in the morning.

*Materia Medica.* One course, 4*l.* 4*s.*; two courses, 6*l.* 6*s.*; Tuesday and Thursday, at eleven o'clock, A.M.; private tutorage, perpetual, 10*l.* 10*s.*; perpetual to all the lectures, and to private tutorage, 21*l.* N.B. House pupils are received.

## MEDICAL THEATRE,

## WESTMINSTER DISPENSARY,

Gerrard Street, Soho, and at 61, Hatton Garden.

Dr. Ryan commences his Lectures on the Practice of Medicine, Midwifery, and Medical Jurisprudence, in October, January, and May. Principles and Practice of Medicine, one course, 3*l.* 3*s.*; perpetual, 5*l.* 5*s.*; Midwifery, and Diseases of Women and Children, one course, 3*l.* 3*s.*; perpetual, 5*l.* 5*s.*; Medical Jurisprudence, one course, 2*l.* 2*s.*; perpetual, 3*l.* 3*s.*; perpetual to all the lectures, if entered to at once, 10*l.* 10*s.* Dr. Ryan lectures every evening at five o'clock, at the Dispensary; and every morning at eight o'clock, at his residence, Hatton Garden, contiguous to St. Bartholomew's Hospital.

## MIDWIFERY.

Dr. Waller, consulting accoucheur to the London and Southwark Midwifery Institution, will commence his Winter Course of Lectures on Midwifery and Diseases of Women and Children, on Tuesday, October 2d, at nine o'clock in the morning, at his residence, 93, Bartholomew Close, near the eastern gate of St. Bartholomew's Hospital. Prospectuses may be obtained at 93, Bartholomew Close, at the General Dispensary, Aldersgate Street, and at Mr. Ferguson's, Instrument Maker, Smithfield.

## ROYAL WESTMINSTER OPHTHALMIC HOSPITAL,

## CHARING CROSS.

Physician, \_\_\_\_\_, Surgeon, Mr. Guthrie. This Hospital is open to students on Tuesdays and Thursdays at twelve o'clock. Terms of attendance, 5*l.* 5*s.* The lectures on the anatomy, diseases, and operations of the eye, although forming a part of the lectures on surgery delivered by Mr. Guthrie every Monday and Friday evenings, are free to students attending the practice of the Ophthalmic Hospital.

## LONDON INFIRMARY FOR CURING DISEASES OF THE EYE, Moorfields.

Physician, Dr. Farre; Surgeons, Messrs. Tyrrell and Scott. Three months, 5*l.* 5*s.*; six months, 8*l.* 8*s.*; perpetual, 10*l.* 10*s.* Days of operating, Thursdays, at one o'clock.

## THE GENERAL DISPENSARY, 36, ALDERSGATE STREET.

Consulting Physician, Dr. Birkbeck; Physicians, Drs. Clutterbuck, Lamb, and Roberts; Surgeons, Messrs. Salmon and Coulson; Apothecary, Mr. Pereira. Nine months, 7*l.* 7*s.*; twelve months, 9*l.* 9*s.*; perpetual, 12*l.* 12*s.*

## PUBLIC DISPENSARY,

Bishop's Court, Chancery Lane.

*Medical Practice.*—Physicians, Dr. Burne. Mondays and Thursdays, at a quarter after twelve o'clock; Dr. Waterfield, Tuesdays and Fridays, at a quarter after twelve o'clock. For six months, 4*l.* 4*s.*; for fifteen months, 6*l.* 6*s.*; perpetual, 10*l.* 10*s.*

Observations will be made upon the cases as they present themselves, and clinical lectures will be delivered occasionally, so as to form a course of practical medicine in the twelve months.

Certificates qualify for the Apothecaries' Hall.

## ROYAL DISPENSARY FOR DISEASES OF THE EAR, Dean-street.

Mr. Curtis, Aurist to his Majesty and their Royal Highnesses the Duke and Duchess of Gloucester, and Surgeon to this Institution, will commence his next Course of Lectures on the Anatomy, Physiology, and Pathology of the Ear, and the Medical Treatment of the Deaf and Dumb, on Monday, October 5th. For particulars apply to Mr. Curtis, at his house, No. 2, Soho-square.

The Royal Dispensary is open to pupils. Physician, Dr. Sims; surgeon, Mr. Curtis. Three months, 5*l.* 5*s.*; six months, 8*l.* 8*s.*; perpetual, 10*l.* 10*s.*

*Anatomy, Physiology, and Diseases of the Ear.* Mr. Curtis, commencing October 2, at ten o'clock. Single course, 2*l.* 2*s.*; two ditto, 3*l.* 3*s.*; perpetual, 5*l.* 5*s.*

Clinical lectures will be given on the most important cases that occur at the Dispensary.

## VETERINARY COLLEGE, St. Pancras.

*Anatomy, Physiology, and Pathology of the Horse;* Mr. Coleman. A Course of Lectures on the Anatomy, Physiology, and Pathology of the Horse, commences on Monday, the 13th of November, at Eleven o'clock in the Morning. Terms, £21.

ROYAL COLLEGE OF SURGEONS IN LONDON.

REGULATIONS of the Council, respecting the professional education of candidates for the diploma.

I. Candidates will be required to bring proof,

1. Of being twenty-two years of age.
2. Of having been engaged six years in the acquirement of professional knowledge.
3. Of having studied anatomy and physiology, by attendance on lectures and demonstrations, and by dissections, during two anatomical seasons.
4. Of having attended at least two courses of lectures on surgery, delivered in two distinct periods or seasons, each course to comprise not less than sixty lectures.
5. Of having attended lectures on the practice of physic, on chemistry and on midwifery during six months; and on botany and materia medica during three months.
6. Of having attended during twelve months the surgical practice of a recognized hospital in London, Dublin, Edinburgh, Glasgow, or Aberdeen; or for six months in any one of such hospitals and twelve months in any recognized provincial hospital.

II. Members and licentiates in surgery of any legally constituted College of Surgeons in the united kingdom, and graduates in surgery of any university requiring residence to obtain degrees, will be admitted for examination on producing their diploma, licence, or degree, together with proofs of being twenty-two years of age, and of having been occupied five years in the acquirement of professional knowledge.

N. B. Certificates will not be recognized, from any hospital unless the surgeons thereto, or a majority of them be members of one of the legally constituted Colleges of Surgeons in the United Kingdom, nor from any school of anatomy, physiology, surgery or midwifery, unless the respective teachers be members of some legally constituted College of Physicians or Surgeons in the United Kingdom.

Certificates will not be received on more than two branches of science from one and the same lecturer, but

Anatomy and Physiology,  
Demonstrations and Dissections,  
Materia Medica and Botany,  
will be respectively considered as one branch of science.

In the certificates of attendance on hospital practice, and on lectures, the dates of commencement and termination are to be inserted in words at full length.

All the required certificates are to be delivered at the College ten days before the candidate can be admitted to examination.

By order of the Council,  
April 27, 1831. EDMUND BELFOUR, Sec.

REGULATIONS TO BE OBSERVED BY STUDENTS INTENDING TO QUALIFY THEMSELVES TO PRACTISE AS APOTHECARIES, IN ENGLAND AND WALES.

EVERY candidate for a certificate to practise as an apothecary, will be required to produce testimonials,

Of having served an apprenticeship\* of not less than five years to an apothecary :

Of having attained the full age† of twenty-one years :

And of good moral conduct.‡

Students whose attendance on lectures commenced on or after January, 1831, must, in addition to these testimonials, adduce proof of having devoted at least two years to an attendance on lectures and hospital practice ; and of having attended the following courses of lectures§ :—

*Chemistry* ; two courses ; each course consisting of not less than forty-five lectures.

*Materia Medica and Therapeutics* ; two courses : each course consisting of not less than forty-five years.

*Anatomy and Physiology*.—*Anatomical Demonstrations* ; two courses ; of the same extent as required by the Royal College of Surgeons of London.

*Principles and Practice of Medicine* ; two courses ; each course consisting of not less than forty-five lectures, to be attended subsequently to the termination of the first course of lectures on chemistry, materia medica, and anatomy and physiology.

*Botany* : one course.

*Midwifery and the Diseases of Women and Children* ; two courses ; to be attended during the second year.

*Forensic Medicine* ; one course ; to be attended during the second year.

Students are likewise recommended to avail themselves of instruction of morbid anatomy.

The candidate must also have attended for twelve months, at least, the physician's practice at an hospital containing not less than sixty beds, and where a course of clinical lectures is given ; or for fifteen months at an hospital wherein clinical lectures are not

\* The apprenticeship must have been served with a person legally qualified to practise as an apothecary, either by having been in practice prior to or on the 1st of August, 1815, or by having received a certificate of his qualification from the Court of Examiners.

† As evidence of age, a copy of the baptismal register will be required in every case where it can possibly be procured.

‡ A testimonial of moral character from the gentleman to whom the candidate has been an apprentice, will always be more satisfactory than from any other person.

§ The lectures required in each course respectively, must be given on separate days.

Given; or for fifteen months at a dispensary\* connected with some medical school recognized by the Court. The whole of such attendance to be subsequent to the first year of attendance on lectures.

Students whose lectures commenced prior to the 1st of February, 1828, will be admitted to examination in conformity with the regulations published in September, 1826, viz. after an attendance on,

One course of lectures on chemistry.

One course of lectures on materia medica.

Two courses of lectures on anatomy and physiology.

Two courses of lectures on the theory and practice of medicine;

And six months' physician's practice at a hospital, or nine months at a dispensary.

Those who began to attend lectures subsequently to the 1st of February, 1828, and previously to the 1st of October of the same year, in conformity with the regulations of September, 1827, viz. after the attendance on

One course of lectures on chemistry.

One course of lectures on materia medica and botany.

Two courses of lectures on anatomy and physiology.

Two courses of lectures on the theory and practice of medicine; these last having been attended subsequently to the lectures on chemistry and materia medica, and to one course at least of anatomy;

And six months at least, physician's practice at an hospital, or nine months at a dispensary; such attendance having commenced subsequently to the termination of the first course of lectures on the principles and practice of medicine.

Those whose attendance on lectures commenced in October, 1828, must have complied with the regulations of September, 1828, viz. by having attended

Two courses of lectures on chemistry.

Two courses of lectures on materia medica and botany.

Two courses of lectures on anatomy and physiology.

Two courses of anatomical demonstrations.

Two courses of lectures on the theory and practice of medicine; these last having been attended subsequently to one course of lectures on chemistry, materia medica, and botany;

And six months at least, the physician's practice at a hospital, containing not less than sixty beds, or nine months at a dispensary; such attendance having commenced subsequently to the termination of the first

course of lectures on the principles and practice of medicine.

All students who began to attend lectures in January, 1829, are required to have attended the physician's practice at a hospital for nine months, or at a dispensary for twelve months, and also to have attended

Two courses of lectures on midwifery and the diseases of women and children.

The testimonials of attendance on lectures and hospital practice, must be given on a printed form, with which students may be supplied, on application, at the under-mentioned places:—

In London, at the Beadle's Office, at this Hall.

In Edinburgh, at Messrs. Mac Lachlan and Stewart's, booksellers.

In Dublin, at Messrs. Hodges and Smith's, booksellers.

In the provincial towns, where there are medical schools, from the gentlemen who keep the register of the school.

No other form of testimonial will be received; and no attendance on lectures will qualify a candidate for examination, unless the lecturer is recognized by the Court.

The names of the lecturers recognized by the Court, may be seen on application to the several gentlemen acting as registrars in the provincial schools, and at the Beadle's Office at the Hall.

The teachers in Dublin, Edinburgh, Glasgow, and Aberdeen, recognized by the constituted medical authorities in these places respectively, are recognized by the Court.

#### RECOGNITION OF LECTURERS.

Gentlemen wishing to be recognized as lecturers, are referred to the following resolutions of the Court, passed on the 18th of November, 1830, viz.

Resolved,

That a member of the Court of Examiners shall not be recognized as a lecturer on any branch of medical science.

That the Court will not recognize any new teacher who may give lectures on more than two branches of medical science; nor will they sanction a teacher already recognized in giving lectures on any new branch of the science, if already he gives lectures on two.

That the Court will not recognize a teacher until he has given a public course of lectures on the subject he purposes to teach; but if, after such preliminary course of lectures, the teacher should be recognized, the student's certificate of attendance on that course will be received.

That the Court will not recognize a teacher until he has produced very satisfactory testimonials of his attainments in the science he purposes to teach, and also of his ability as a teacher of it, from persons of acknowledged talents and of distinguished acquire-

\* By a new regulation, every dispensary recognized at any time is allowed. It is not necessary that there should be a medical school attached.—Eds.

ments in the particular branch of science in question.

That satisfactory assurance shall also be given that the teacher is in possession of the means requisite for the full illustration of his lectures, viz. that he has, if lecturing—

On chemistry, a laboratory and competent apparatus.

On materia medica, a museum sufficiently extensive.

On anatomy and physiology, a museum sufficiently well furnished with preparations, and the means of procuring recent subjects for demonstration.

On botany, a hortus siccus, plates or drawings, and the means of procuring fresh specimens.

On midwifery, a museum, and such an appointment in a public midwifery institution as may enable him to give his pupils practical instructions.

That the lecturer on the principles and practice of medicine must be, if he lectures in London, or within seven miles thereof, a fellow, candidate, or licentiate of the Royal College of Physicians of London, and if he lectures beyond seven miles from London, and not be thus qualified, he must be a graduated doctor of medicine of the British University of four years' standing (unless previously to his graduation he had been for four years a licentiate of this Court).

That the lecturer on materia medica and therapeutics must be a fellow, candidate, or licentiate of the Royal College of Physicians of London, a graduated doctor of medicine of a British University of four years' standing (unless previously to his graduation he had been for the same length of time a licentiate of this Court, or he must be a licentiate of this Court of four years' standing.

That the lecturer on anatomy and physiology must either be recognized by the Royal College of Surgeons of London, or must be a member of that College of four years' standing.

That the demonstrator of anatomy must either be recognized by the Royal College of Surgeons of London, or must be a member of that College.

#### EXAMINATION.

Every person offering himself for examination must give notice in writing to the clerk of the society on or before the Monday previously to the day of examination; and must also at the same time deposit all the required testimonials at the office of the Beadle, where attendance is given every day, except Sunday, from nine until two o'clock.

Candidates will be admitted to examination in the order in which their names stand on the notice paper; and those neglecting to attend agreeably to their notice, will, upon a subsequent application, be placed at the bottom of the list.

The examination of the candidate will be as follows:—

1. In translating parts of Celsus de Medicina, or Gregory's *Conspectus Medicinæ Theoreticæ*, the *Pharmacopœia Londinensis*, and Physicians' prescriptions.

2. In chemistry.

3. In materia medica and therapeutics.

4. In botany.

5. In anatomy and physiology.

6. In the practice of medicine.

By the 22d section of the Act of Parliament, no rejected candidate can be readmitted to be examined until the expiration of six months from his former examination.

The Court meet in the Hall every Thursday, where candidates are required to attend at a quarter before four o'clock.

The Act directs the following sums to be paid for certificates:—

For London, and within ten miles thereof, ten guineas.

For all other parts of England and Wales, six guineas.

Persons having paid the latter sum become entitled to practise in London, and within ten miles thereof, by paying four guineas in addition.

For an assistant's certificate, two guineas.

By order of the Court,

JOHN WATSON,

Secretary.

Apothecaries' Hall,

Sept. 22, 1832.

#### REGULATIONS OF THE NAVY MEDICAL BOARD.

##### *Victualling-Office.*

THE Right Honorable the Lords Commissioners of the Admiralty having been pleased to direct, "that no person be admitted to be a candidate for the situation of Assistant Surgeon in the Royal Navy, who shall not produce a certificate from one of the Royal Colleges of Surgeons of London, Edinburgh, or Dublin, of his fitness for that office; nor, for that of Surgeon, unless he shall produce a diploma, or certificate, from one of the said Royal Colleges, founded on an examination to be passed subsequently to his appointment of Assistant Surgeon, as to the candidate's fitness for the situation of Surgeon in the Navy; and that in every case the candidate producing such certificate, or diploma, shall also undergo a further examination before the Medical Commissioners of the Victualling Board,

touching his qualifications in all the necessary branches and points of Medicine and Surgery for each of the steps in the Naval Medical Service." The commissioners for victualling His Majesty's Navy, &c. do hereby signify, for the information of those persons to whom it may relate, that these regulations and directions will be strictly adhered to in future: and further, that previously to the admission of Assistant Surgeons into the Navy, it will be required that they should have received a classical education, and possess in particular a competent knowledge of Latin; also

That they should have served an apprenticeship, or have been employed in an apothecary's shop for not less than two years.

That their age should not be less than twenty years, nor more than twenty six years; and that they should be unmarried.

That they should have attended an Hospital in London, Edinburgh, Dublin, or Glasgow, for twelve months; and

That they should have attended Lectures, &c. on the following subjects, for periods not less than hereunder stated; observing, however, that such Lectures will not be admitted for more than two different branches of science, by one individual, viz.—

	MONTHS.
Anatomy . . . . .	18
Surgery . . . . .	18
Theory of Medicine . . . . .	12
Practice of ditto . . . . .	12
Chemistry . . . . .	6
Materia Medica . . . . .	6
Midwifery . . . . .	6
Actual dissections of the human body . . . . .	6

Although the above are the only qualifications which are absolutely required in candidates for the appointment of Assistant Surgeon, a preference will be given to those who, by possessing a knowledge of diseases of the eye, and of any branch of science connected with the pro-

fession, such as Botany, Medical Jurisprudence, Natural Philosophy, &c. appear to be more peculiarly eligible for admission into the service.

It is also to be observed that, by the rules of the service, no Assistant Surgeon can be promoted to the rank of Surgeon until he shall have been three years in the former capacity; and the Board have resolved that not any diploma or certificate of examination from either of the aforesaid Royal Colleges, shall be admitted towards the qualification for Surgeon, unless the diploma or certificate shall be obtained on an examination passed after a period of not less than three years from the date of the party's admission into the service.

By command of the Board,

M. WALLER CLIFTON.

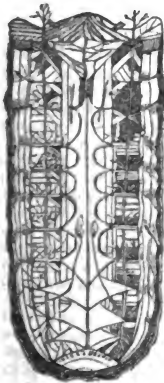
### Reviews.

*Alphabet of Insects for the Use of Beginners.* By JAMES RENNIE, M.A. Professor of Zoology, King's College, London. 12mo. pp. 108. Numerous wood-cuts. London: 1832. W. Orr.

WE turn from the more serious subjects which usually occupy us, to the light and amusing science of natural history. This interesting little production has especially attracted our attention, and we must, in justice, recommend it to all desirous of studying entomology. It is an instructive work for youth. We shall proceed forthwith to make a few extracts, as we are well aware that they will prove far more agreeable than mere assertion. As a good example of the style in which the wood-cuts are executed, we take the vignette, which gives an excellent view of "the queen butterfly in its various stages."



At page 36, we find the following curious plate of the muscles of the caterpillar of the goat-moth.



Muscles of the caterpillar of the goat moth (*Cossus ligniperda*); with the two main air-pipes running along each side, and the heart with its six pairs of pramidiæ wings in the middle.

At page 59, we have a very good account of the organs of digestion, which we shall transfer to our pages, together with the illustrative wood-cut.

#### ORGANS OF DIGESTION.

It is remarkable that the length of the organs of digestion in insects, measuring from the mouth to the vent, is, as in the larger animals, proportioned to the sort of food. Vegetable food, being more crude, or not so like the properties of the animal body, requires more preparation to turn it into nourishment; and hence, insects, and other animals which feed on vegetables, have their organs of digestion of great length, much longer, indeed, than the body, in which they wind in many folds. Animal food requiring less preparation, the insects which feed on it have their organs of digestion short, and of the same length as the body. In all cases they consist of three layers, the outer membranous, the middle muscular, and the inner mucous.

When the food has been taken into the mouth and bruised, or chewed by the jaws when those are moveable, or sucked up when they form a sucking tube, it passes on to the haüs or entrance of the gullet, and thence to the stomach and intestines as in the larger animals.

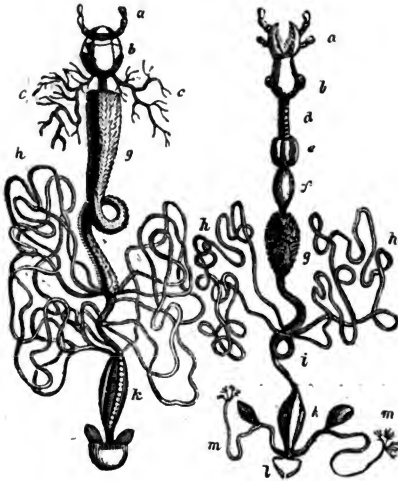
In man, the food is mixed, during the process of chewing, with a peculiar fluid supplied from several glands or fountains situated near the mouth. In insects, similar fountains have been described by Raimdohr, Leon Dufour, and others. They are most obvious in sucking insects, and when a fly cannot suck a bit of dry sugar, it has been observed to moisten it with this fluid.

The organs which furnish the silk, spun by the silk-worm and other caterpillars, are similarly situated with the preceding, and perhaps are the same organs.



The most complicated organs of digestion (found, of course, in insects feeding on vegetable matter), may be described under six

divisions, the gullet, the crop, the gizzard, the stomach, the intestines, and the vent.



The organs of digestion in two different beetles. Fig. 1, a garden beetle (*Carabus*); Fig. 2, a churchyard beetle (*Blaps*). *a*, The jaws and feelers; *b*, the head; *c, c*, the saliva vessels; *d*, the gullet, very short in Fig. 1. *e*, the crop, wanting in Fig. 1; *f*, the gizzard, wanting in Fig. 1; *g*, the stomach, large and convoluted in Fig. 1; *h, h, h*, the bile vessels long, and numerous; *i*, the small intestine; *k*, the blind gut; *l*, the vent; *m, m*, the excrementary vessels.

The gullet varies much in length, being sometimes very short, and sometimes reaching to the abdomen, or even within it, but it is more generally the length of the fore corselet within which it is lodged. When there is no crop or gizzard, it ends in the stomach. At its upper end, it is surrounded by a nervous ring, from which two branches go off and unite at the lower part of the body.

The crop or craw is a bulging out of the gullet into a sort of pouch, which, on the outside, can seldom be distinguished from the gizzard; but, on the inside, it is found destitute of horny projections, and its texture more membranous than muscular. When large, it is often seen with folds or plaits. It constitutes what is called the honey bag of the bee, and it is in it that insects have the fluids, often offensive, which they discharge when caught, as is observed in many beetles. In butterflies and other sucking insects, it is placed on one side of the gullet, and not in

the line of the stomach. Its contents have, therefore, to be returned into the mouth before they can reach the stomach. The crop is not found at all in many instances.

The gizzard succeeds the crop, and is more muscular in structure, and furnished on the inside with moveable horny projections, most probably employed in bruising the food. These horny pieces are of various figures, and placed in various directions, sometimes like a brush, sometimes like a comb; and just above the entrance of the stomach they nearly close the passage, forming a sort of valve, which will only permit minute portions of the food to pass. Swammerdam and Cuvier are mistaken in thinking insects which have a gizzard, such as grasshoppers, chew the cud. The chewing motion which deceived them, I have found to be the process of cleaning the feet and the ears. The gizzard is not found in all insects.

The stomach is composed of thin, soft, extensible, membranes, usually cylindrical in form, but sometimes with bulgings and contractions, and sometimes forked, the entrance being at one of the forks. One remarkable circumstance is, that, in many insects, the outer surface is covered with a number of teat-like points, similar to the finger of a glove, containing fluid, which they discharge into the stomach. These may be termed vessels. They vary much in size and number, and are not found in all insects.

Different opinions are held respecting them by Cuvier, Marcel de Serres, and Leon Dufour.

In all insects, we believe, there are vessels called bile vessels, consisting of several membranous tubes, filled with a peculiar fluid, bitter, and usually brown or yellow, but sometimes limpid, supposed to be similar to bile, though we find nothing like the liver for preparing this bile, which is probably, therefore, as M. Gæde thinks, prepared in the vessels themselves. These vessels float in many convolutions in the abdomen, one end being sometimes free and the other fixed, and sometimes both ends fixed, and giving rise to a sort of arch or curve. Sometimes these are inserted into the stomach near its outlet; in others, one end goes into the stomach, and the other into the blind gut. Their number varies from two, which are found in the rose-chaffer; to four, found in beetles and coramon flies; to six, found in butterflies, and to even one hundred and fifty (probably mere branches of two fundamental ones), found in bees, wasps, and dragon-flies.

It is in the stomach that the food is converted, by means of the digestive fluid, from the gastric vessels and the bile, into a pulpy mass, called chyle, if we may follow the analogy of other animals.

The outlet of the stomach is in insects, furnished with a valve to prevent the too rapid passage of the chyle into the intestines.

The intestines form an extended portion of the organs of digestion, which may be divided into four parts, the chyle gut, the small gut, the blind gut, and the vent gut.

The chyle gut, which is always found in large animals, is seldom, in insects, different from the small gut. When it is distinguishable, as in the glow-worm, it is very smooth. It receives the chyle from the stomach.

The small gut is usually strait, smooth, and of equal size through its whole length, though there are bulgings in some species; and, for the most part, it has many convolutions. The chyle, in passing along, has its nutritive portions taken up by the inner membrane of this intestine, through which it passes into the cavity of the abdomen, and not, as in other animals, into lacteals, in order to be converted into red blood, which is not found in insects.

The blind gut consists usually of an egg-shaped cavity, formed by the bulging out of the lower end of the small intestine. It is often covered with plaits or bands; sometimes the bile vessels open into it, and it always contains the crude parts of the chyle rejected by the small gut as unfit for nourishment. Insects have no gut precisely similar to the colon of other animals.

The vent gut is very muscular, and usually short. It ends in the vent, through which the crude parts of the chyle, collected in the blind gut, are thrown out of the body.

The singular discharges of offensive matter, such as the poison of the bee, and the vapour of the bombardier beetle, are prepared near the vent gut by a particular apparatus, and stored up in a sort of bladder, from which they are discharged.

In the abdomen of a certain class of bees in the common hive, called wax workers, are cells between the rings, in which wax appears to be prepared by secretion from the food within, and not collected, as is supposed, directly from flowers; as the pollen is well known to be upon the thighs for the purposes of food. This opinion, however, which I have not myself verified by observation, is contrary to that popularly held. It was first stated by Hornbostel, a clergyman at Hamburg, in 1744, and republished as his own discovery, by Reim, in 1769. Mr. John Hunter, evidently without being aware of these, published it as his own discovery in 1793; and Huber, assisted by the clever daughter of Professor Jurine, made experiments and dissections, all confirmatory of the same view. Recently G. R. Treviranus, one of the best living experimental physiologists, has repeated the investigations, and has come to the same conclusion. I think these high authorities must outweigh that of Mr. Huish, who decides that they are all wrong, and that the popular notion is right.

The nutritive part of the chyle, which is (if the term may be used) filtered through the sides of the small gut, is not then received into any vessel, as has already been said, but spreads about through the interior of the body, taking the form of an irregular mass of soft pulpy fat, greenish or whitish in colour, which surrounds the organs of digestion, and fills up every vacant place in the body, particularly in caterpillars, of which it forms a very large proportion of the whole bulk.

The more fluid portions appear to be taken up through the membranes of the several organs, probably in a similar way to that by which they previously passed through the membranes of the small intestine. On this subject, however, we are still very much in the dark: though it is certain the fat is employed for the purposes of nutrition; for it is always stored up in great quantity before an insect passes into the state of chrysalis, when it ceases to eat, and often remains torpid for many months; and is also found similarly stored up in the female before the eggs are laid, but after this disappears.

The nutritive matter, whether it be fat or fluid, not being carried through the body in arteries and veins as the blood is in other animals, to nourish the several parts, lies around and upon the parts to be nourished, which absorb the peculiar portions they require, rejecting the rest; and this may be required by other parts for a different purpose.

The more solid portions may be required by the muscles, the layers of the intestines,

the horny skin, and perhaps by the nerves; while the more fluid portion may be taken up by the gastric vessels, the bile vessels, and the peculiar vessel, which is the only organ found in insects in the least resembling a heart.

The last extract which we shall make from this interesting little book, is the description of the organs of respiration.

The spiracles convey the air which they inspire from without to a corresponding number of air pipes, to be carried into the body, as the air inspired by man is carried into the windpipe and the lungs. The several air pipes which go from the spiracles end in a common pipe on each side, and these two common pipes may be termed the main air-pipes. They run lengthways from the head towards the vent, and send off innumerable small branches to convey the air to the different parts of the body, somewhat like the branches of certain shrubs; the branchlets interlace the membranes, penetrate the muscles, and extend through the legs and the wings.

Two sorts of these air organs have been distinguished, the one tubular or pipe-like, as those we have just described, and another vesicular or cell-like.

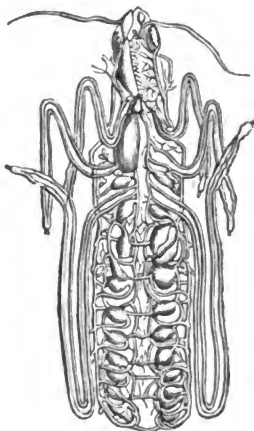
The first sort, or air-pipes, are composed of three distinct membranes, the outer and inner of which are thick, extensible, and of a cellular texture, while the middle one is formed of a gristly thread rolled spirally round in the manner of a corkscrew, and very similar to the spiral air pipes of plants. This gristly spiral thread is very elastic, in consequence of which the pipe is kept uniformly open, for even when it is compressed by the muscles, it immediately expands again. There is a similar mechanism of gristle in the human wind pipe.

These air pipes have also been distinguished, from their situations, into arterial and pulmonary, the arterial being those which come directly from the spiracles; and the pulmonary, the two large pipes on each side of the body, (not always traceable), from which other arterial pipes branch off. The structure of both these is similar.

The second sort, or air-cells, are without the spiral gristle, being composed only of an outer and inner membrane. Consequently, those air cells, when not filled with air, must become flaccid by their sides collapsing. They are not in the form of pipes, but like cells or pouches, mutually communicating with each other through very short and simple canals. They never communicate directly with the spiracles, but receive their air from the air tubes. They are not found in all insects; but, when they occur, they appear to serve the purpose of reservoirs for air.

They vary also in number and in size. In

the rose chafer, for example, they are very small and very numerous; but comparatively large in grasshoppers and crickets. In these insects, the air cells can be easily counted. It would be a difficult matter to inflate them with air, had there not been an ingenious contrivance to facilitate this, in a sort of ribs with which their sides are provided, discovered by Marcel de Serres, and consisting of small projections from the edge of each ring of the belly, and not distinct jointed members.



The breathing apparatus in the Praying Mantis, showing the numerous air tubes and air cells on each side.

The air then is breathed by means of these various organs, and acts on the blood, or the fluid similar to blood, somewhat, it may be presumed, in the same way as it acts on the human blood, in the lungs, oxygen being abstracted, and carbonaceous matter carried off.

The insects which live under water constantly or partially, have peculiar organs for decomposing the water of the air it contains in order to procure oxygen, which appears to be indispensable to life. Some of these water insects, indeed, come ever and anon to the surface, in the same manner as the water eft and the whale, to breath the air. Others remain always under water.

We are happy to perceive that Mr. Rennie intends pursuing the same plan in regard to other subjects in this branch of science. We wish him success, which he richly merits.

*The Dublin Journal of Medical and Chemical Science, exhibiting a comprehensive view of the latest discoveries in Medicine, Surgery, Chemistry, and the collateral Sciences.*

Dublin, Sep. Hodges and Smith.

THIS excellent Journal is considerably enlarged, and gives an extraordinary quantity of matter at a small price. It contains as usual several articles of great interest, and these we shall briefly notice, recommending the work as worthy of a place in every medical library. The original communications are ten in number.

ART. I.—*Metastasis of Rheumatism to the Heart.* By ROBERT LAW, M.D.

This was a case of rheumatism in an unmarried girl, at 19, accompanied by swellings of the legs which resembled phlegmasia dolens. Her disease was attended by fever. The remedies were venesection, diaphoretics, colchicum, digitalis, tartarized antimony, and elaterium. Diuretics, calomel and opium were also administered.

The respiration became laborious, the action of the heart violent and diffused, the pulse rapid, and the inferior half of the left lung evinced the absence of respiration inferiorly, and yielded a dull sound on percussion. These symptoms however had not been preceded by the râle crepitant, invariable precursor of hepatization, and might depend upon the pressure of fluid in the pericardium, gravitating towards this part of the chest, when the patient assumed the sitting posture. In order to ascertain this, the patient was placed on her face, and then auscultation proved the lung to be pervious, and hence the narrator concluded there was extensive effusion into the pericardium. He ordered squill, calomel, acetate of potass, digitalis, nitrous æther, and elaterium, with blisters to the region of the heart. A complete cure was effected. In this case auscultation was of great value, and enabled a judicious physician to save the life of

his patient. The accurate judgment shown in the detection of the real disease in this instance, proves Dr. Law to be well versed in stethoscopy, and to be a good and skilful practitioner.

ART. II.—*Practical Remarks on Delirium Tremens.* By CHAS. LENDRICK, M.D. T.C.D.

Dr. Lendrick very correctly states, that delirium tremens is common to all ranks, though the middle and lower classes are most commonly affected, and also that it is not confined to the male sex. He has observed it a frequent attendant on local injuries, and he inculcates the necessity of employing the patient's usual stimulus, a point for which Dr. Ryan has long contended in this Journal. (vid. Vol. 3, 1830). Dr. L. divides the disease into sthenic and asthenic, and considers the diagnosis easy, an opinion to which we can by no means assent in many cases. He strongly advises the acetate of morphine as the best opiate. He states that the copious administration of spirituous liquors, amongst other evils, causes the recurrence of the paroxysms; but when the patient is broken down by dram drinking, a small quantity of brandy is necessary, or of mulled wine, if the patient is one of the upper classes. Repeated experience has convinced us, that the habitual stimulus is most decidedly the best and most efficacious remedy in the asthenic form of the disease. We have found ardent spirits, wine, porter, and cyder, superior to all medicines, according to the previous predilection of the patient. We have cured the spirit drinker by his usual beverage, so also the porter, cyder, and gin drinker. We might narrate several successful cases in proof of the correctness of this opinion. Our firm conviction is, that the habitual or usual beverage of the patient is the best remedy in pure nervous or asthenic delirium.

The sthenic form is combined with inflammation of the brain, according

to our author, and here he recommends arteriotomy from the temple, tartarized antimony, and a moderate use of the acetum opium, with cold or tepid shower bath. When exhaustion is produced, he would use stimulants. Dr. Lendrick concludes by narrating a case of mania combined with delirium tremens, and induced by the abuse of whiskey, which was cured by arteriotomy from the temple. This paper affords satisfactory evidence that its author is a cautious and successful physician, one who does not confound both forms of the disorder, and who erroneously recommends copious depletion in every instance.

ART. III.—*A new Method of graduating Glass Beads, for the purpose of ascertaining the specific gravity of fluids.* By WILLIAM FERGUSON, Operative Chemist to the Apothecaries' Hall.

This paper will be perused with deep interest by the practical chemist.

ART. IV.—*Observations on the Treatment of various Diseases.* By J. R. GRAVES, M.D. King's Professor of the Institutes of Medicine.

*Convulsions in Chronic Dropsies.*—Four cases are detailed by the erudite and experienced professor, in which convulsions occurred without any obvious cause during the ordinary treatment for dropsy. This combination of diseases is not mentioned by monographers on hydrophic maladies. In three of the cases the dropsy was rapidly cured, and in the four the cerebral symptoms entirely disappeared, "a fact," says Dr. Graves, "which forms a striking contrast with the invariable fatality of convulsions when they supervene on jaundice."

*Tincture of Cantharides in Hooping Cough.*—In the catarrhal or first stage of the disease, Dr. G. agrees with Dr. Muckintosh in advising the antiphlogistic treatment, leeches to the larynx, antimonials and nauseating doses of ipecacuanha. When the febrile symptoms subside after the second or third week, and the cough

continues violent, defying all remedies, our author has found the following formula, which was prescribed by the late Dr. Beatty, productive of great benefit, and often an effectual remedy.

R. *Tinct. cinchonæ*, c. ʒv.  
*Tinct. cantharidis.*  
*Tinct. opii. camphorat.* } a. a. ʒss.

Dose—a drachm three times a day in linseed tea or barley-water, and after the fifth or sixth year, the quantity may be steadily increased to four drachms. This has proved effectual in several cases.

*Cold dash in convulsions of infants.* Dr. Graves very candidly informs us, that since the publication of his paper in the second Number of the Journal before us, he has discovered in Richter's *Specielle Therapie*, the recommendation of a similar practice to his own—the application of a small stream of ice cold water to the head, with great success both in the convulsions and coma of hydrocephalus. This practice is pursued by Dr. Heim of Berlin, and repeated so long as fits or insensibility continues. The neck and shoulders ought to be covered with oiled silk, and the body kept warm. We had lately an opportunity of employing the cold affusion according to this plan; but though it was repeated for nearly two hours, it did not stop the convulsions, but certainly diminished them.

*Hydrosulphuret of Ammonia in Diseases of the Heart.*

In the second volume of the work under notice, Mr. Newton stated that Dr. Marsh and himself had found this hydrosulphuret of ammonia possessed a powerful effect in lowering the pulse. Dr. Graves has tried this remedy in several cases, some of hypertrophy, with increased action of the heart, and in others the heart's action was natural. The remedy was increased to 25 or 30 drops four times a day, largely diluted, as recommended by Dr. Marsh. Behold the results. "In no one instance did it exert the slightest effect upon the

heart's action or the pulse." The medicine was genuine, and administered by the apothecary of the hospital.

*Evacuations of blood from the stomach and bowels, caused by chlorine.*

A woman, who was exposed to chlorine gas, which was employed as a fumigation in a house in which a gentleman died of spasmodic cholera, was seized with difficulty of respiration, pains in the præcordia, chest, and head. These were succeeded by vomiting of dark liver-like blood, which also passed by the bowels. Under ordinary remedies recovery took place.

*Efficacy of assafatidea in hysteria.*

Dr. Graves is convinced that assafatidea in large doses, is the best remedy in hysteria. He prefers it to counter-irritation, even the actual caутery applied to the spine. An obstinate case yielded to this remedy in seven days, during which twelve grains were given.

(To be continued.)

THE

London Medical & Surgical Journal.

Saturday, September 29, 1832.

MORE HORRORS CAUSED

BY THE

SUPPORTERS OF A FALSE  
DOCTRINE!

We intreat all those members of the profession who have been observers of the many extraordinary events which have been for some time passing, not to overlook the report of a Coronor's inquest held at Exeter last month, on the body of an unfortunate man of the name of John

Vicary, who it appears had, while labouring under a most severe attack of cholera in Dawlish, been put into a cart at night, by force, and sent off to Exeter, a distance of ten miles, where he died soon after his arrival. Look over the details, gentle reader—it is desirable that you should. You will find it in evidence that the poor wretch was carried, in this improper manner, even without straw, at night; his feet hanging over the tail of the cart, and his "icy" limbs found to have been bruised and otherwise injured by the jolting, on his arrival about day-break. You will find that at Dawlish, a poor man who was anxious to procure him better assistance was—"hissed"—yes, hissed by some monsters,—hissed!! All this you will find detailed very minutely in the *True Sun* of the 31st of August, where you will find what will give you some comfort however, a verdict "that John Vicary came by his death by the culpable and wilful conduct of Robert Leeson, William Hall, and Richard Terris, and that they are all guilty of manslaughter." These are persons in authority at Dawlish.

When you have read the above, gentle reader, try to get a peep at the *Ayr Advertiser* for the 20th inst. where you will find abominations recorded, regarding a poor woman labouring under cholera at the village of Slatford, and the like of which never before appeared in the catalogue of the iniquitous crimes of mankind. Not only was the poor being, in this instance, refused the

shelter of a hovel, and exposed on a wheel-barrow, "the canopy of the heavens for a roof" to her hard bed, but the medical man absolutely obliged to withdraw from affording further aid, under the imprecations of brutes, "*insane from terror of contagion*;" who threatened to burn him or throw him into a pond!! Look on this picture,—and on that, and "then to sup, with what appetite you may." We could fill a volume with accounts of the atrocities which have occurred in this kingdom, arising out of the fear of contagion,—of that principle which our wise *missionaries* told the people of England was so subtle, so diffusible, so liable to vary its plan of attack, that people could seldom say how or whence it came, but which, nevertheless, the best observers every where tell us only exists in men's imaginations. — Magendie, indeed, openly declares, in his splendid lectures on cholera, that the idea that this disease possesses a contagious property is utterly '*absurd*.'

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#### CHOLERA MEDALS.

A COMMISSION appointed in Paris to superintend the issuing of medals to those who have distinguished themselves by their zeal during the prevalence of the cholera, have directed the issue of 596, to residents in the different quarters of the city; 404 are held in reserve for subsequent distribution. The intention of the Belgian government, to appropriate a certain sum to the same purpose,

has been announced. This is all very proper and very laudable, but there is not the smallest chance of such distinctions being bestowed in this country, where it so happens that those who shamefully stood aloof at so awful a period of public calamity, are precisely those who, from their station, have the power of intriguing to prevent any such line being drawn between themselves and those who have honourably fulfilled their duty towards society, we are sure we may add, to their own great prejudice in most cases.

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#### MORTALITY CAUSED BY CHOLERA IN PARIS DURING THE EPIDEMIC.

THE sanitary commission of Paris, aware that material inaccuracies had crept into former tables of mortality which had been drawn up, resolved, lately, to submit the whole to further revision; and the result gives nearly 18,000 as the number of deaths, from the 26th of March to the 31st of August, being much under former statements,

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#### CHOLERA IN LONDON AND THE VICINITY.

It is extremely gratifying to us to be able to say that, according to statements made to us by a gentleman in whom we can place every confidence, and who has made it his business to obtain information personally at a great many points, the epidemic influence which had existed for several months past in this metropolis and neighbourhood, and in the course of

which some very remarkable oscillations took place, may now be considered as having worn itself out. By inquiries made on Thursday and Friday last, on one side of the river from Kensington to Bethnal Green, St. George's in the East, and Shadwell, and on the other from Lambeth to Bermondsey, it appears that scarcely any recent cases existed in the different hospitals, the greater part of the cases remaining under treatment being convalescent. Some practitioners have not indeed had a case of cholera in or out of hospital for three or four weeks past.

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CASE OF IDIOSYNCRACY—EFFECTS OF  
OPIMUM—DANGER OF POISONING BY  
THE MISTAKE OF A CHEMIST'S AP-  
PRENTICE.

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To the Editors of the London Medical and  
Surgical Journal.

GENTLEMEN,

In transmitting to you the following brief account, I am able to vouch for its authenticity.

I am Gentlemen,

Yours truly.

Gordon Smith.

G \* \* \* \* \*, aged 42, never accustomed to the use of opium, in whatever form, labouring under a relaxation of the bowels (being a medical man of considerable experience,) prescribed for himself.

He had repeatedly sent for *half-grain* pills of solid opium, from which he derived so much benefit, that he generally kept a few by him, and marked the top of the pill box *thus*, opii gr. iij. pil. vj. in order to prevent mistakes. On Wednesday last, the 19th instant, the Doctor sent this box to the shop of a general practitioner, or chemist and

druggist (he does not exactly know which) conceiving that the inscription thereupon was sufficient to direct the compounder properly. The box was brought with six things as large as *swan shot*, instead of *pins heads*, and an exorbitant price was demanded. The prescriber sent back the box with its contents, saying that there must be a mistake, for a few days before he had sent to and received from the same shop pills of opium, or pills of opium  $\frac{1}{2}$  grain each ought to be at one fourth of the price charged. The messenger returned and reported, "that the man or boy in the shop was exceedingly surprised at Dr. —'s objections, that the pills were all right; and that *knowing* (which Dr — does *not* know) the price of opium he could not imagine, &c. &c." This was impertinent enough; but half the price was abated.

Hereupon the Doctor wrote a note to this fellow's master, in which he complained only of the *impertinence* of the shop-boy. Relying upon the assurance that the pills were *right*, and supposing that a clumsy dispenser had taken *powder opium* and mixed  $\frac{1}{2}$  grains thereof with *magensia mica panvis*, or *gum-acacia*, he in the course of five hours i. e. from seven in the evening till midnight, swallowed three of the swan shot sized pills, each composed of three grains of solid opium!!! It was the mercy of Providence that he did not swallow the other three; for he was not aware, till the shopman's master called next day, and told him what had taken place!!!

It is not the least singular part of the affair that the only effect this strong dose of opium took upon a system unaccustomed to its influence was that of spoiling the gentleman's night's rest. He never felt any influence whatever from it other than this.

I decline giving the apothecary's name; but had there been a Coroner's inquest, perhaps the most *extraordinary medical story* of modern times must have become matter of publicity.



## Hospital Reports.

## GUY'S HOSPITAL.

*A case in which dislocation of the femur on the dorsum ilii occurred a second time.*

SEPT. 4.—Eliza Goddard, æt. 25, a young woman of lax muscular fibre and sickly constitution, was brought into Esther Ward, Guy's Hospital, under the care of Mr. Callaway, with a dislocation of the right femur on the dorsum ilii. She was walking in her garden, when she stooped down to pick a flower, and felt the head of the bone slip from its socket, she fell, and was then brought to the hospital.

*Symptoms.*—The leg was one inch and a half or two inches shorter than the other, the foot and knee inverted, the great toe resting on the head of the tarsal bone of the great toe, the knee inverted and projecting forwards, the natural roundness of the hip had disappeared, foot easily turned more inwards, but to turn it outwards was impossible, and gave considerable pain.

*Reduction.*—Previous to her removal to the theatre, tartarised antimony gr. ij. were administered in divided doses. After the adjustment of the pulleys in the usual way, no tendency to faintness or sickness having occurred, ij. grains of antimony were given, and extension having been kept up six minutes and a half, the head of the bone was felt, not heard, to slip in; she was put to bed, a belt being placed round the pelvis. On the 19th of May last, a dislocation of the same femur took place, but she did not come into the hospital (on account of menstruation) till the 29th of May, ten days afterwards. It was then very much shorter than usual, being thrown very far upwards and backwards. It was reduced in the usual manner (previously having been made to smoke a pipe and take some antim. tart.) in forty-five minutes; she had perfect use of the limb up to the time of the second

accident, sometimes using a crutch from weakness.

## WESTMINSTER HOSPITAL.

*Doubtful Dislocation of the Femur.*

A LAD has been in this hospital for several days, who is supposed to labour under dislocation of the femur; some of the surgeons being of opinion that the head of the bone is towards the pubes, others that it is on the dorsum of the ilium. Accordingly extension has been tried successively for each supposed displacement, but without success. This difference of opinion and practice has been highly edifying to the pupils, and has afforded them the consolation of observing sound chirurgical knowledge in one of the favoured and unequalled London hospitals.

*Popliteal Aneurism.*

A case of this disease has been so much benefited by pressure and cold, as to remove all pulsation, and lead to the belief that a cure may be effected without an operation.

## MARCH OF INTELLECT.

A BAVARIAN physician had been deprived of his rank, in consequence of his having written in a work on the cholera, that those persons who *did not possess a good constitution*, were certain to be attacked.—*Le Cercle*.

If this be true, it is a strange comment on the intellect of those, who could not distinguish between the constitution of the body, and the constitution of the state.

## LITERARY INTELLIGENCE.

In our next Number will be a Lecture of Dr. Epps', the first, of a Series of three, being an examination of the operation of blood-letting, to be delivered at the Gerrard-street School, at the commencement of the Session. Dr. E. will give the first lecture on Tuesday next Oct. 2, at half-past nine in the morning, at the Westminster Dispensary, 9, Gerrard-street, Soho.

Errata in Dr. Aldis's paper.—Instead of "For Hales," read "Dr. Hales;" for "9 × ½" read "9 + ½;" for "papim" read "passim."

# London Medical and Surgical Journal.

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SATURDAY, OCTOBER 6, 1832.

Vol. II.

## INTRODUCTORY LECTURE

TO THE COURSE ON THE

### PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

Delivered at the University of London,

On Wednesday Evening, October 3d, 1832,

BY

PROFESSOR SAMUEL COOPER.

*Lectures on the Principles and Practice of Surgery.*

#### LECTURE I.—INTRODUCTION.

GENTLEMEN,

WHEN I ventured last year to undertake a course of surgical lectures at this University, the circumstances of the moment placed me under the necessity of commencing the duty of professor, almost as soon as the appointment had been conferred upon me:—with little opportunity, therefore, for preparation and arrangement, and without the slightest acquaintance with what the museum might contain for the illustration of the subject. Notwithstanding these disadvantages, I succeeded in bringing under the consideration of the gentlemanly and intelligent students, who honoured me with their attendance, such information as was listened to with unremitting and respectful attention, and such, as I trust, will prove of essential service to them in the difficult career of practice. With the obliging assistance of the Conservator of the Museum, I was also enabled to show them all the preparations in it, most calculated to throw light upon those injuries and diseases, which are usually treated of by lecturers on surgery. Select plates and drawings were occasionally employed to render certain subjects more easy of comprehension, and many cases, exemplifying points of interest, faithfully recited, whatever might be their termination. I may add, that few subjects were quitted, without the student having had the opportunity

of gaining further information about them, either on the nights chosen for examination, or directly after the regular lecture hours.

Throughout the session, I was gratified to find my efforts to communicate knowledge well received, the class in every respect orderly, and desirous of information; and the whole tenor of its conduct such as fully to account, in my mind, for the remarkable proficiency, which many of its members evinced in the competition for the prizes and honours distributed last May.

Now, gentlemen, the plan which was adopted in the last course with success and convenience, is that which will be generally pursued in the present one; but the greater facilities, with which these lectures will now be undertaken, will, I hope, enable me to make some parts of them more worthy of attention, and more worthy of an institution destined to be the seat of one of the best regulated medical schools in Europe.

Gentlemen, *surgery*, the subject which I am appointed to teach, belongs to that department of knowledge, which is devoted to the consideration of the diseases and derangements of the human body, the circumstances giving rise to them, their appearances, symptoms, and consequences; and the means of preventing, relieving, or curing them. It is a part, therefore, of the "healing art," or of that extensive business, or duty, which is divided amongst the members of the whole medical profession, in their respective capacities of physicians, surgeons, accoucheurs, general practitioners, oculists, and other labourers, whom I need not here particularly specify. Physic and surgery may be regarded as the principal divisions of the subject, because, properly speaking, midwifery, in its manual parts, may be looked upon as a subdivision of surgery, and, in the rest of it, as a branch of the practice of physic; while the employments of the oculist and dentist are, in every sense of the expression, surgical. As for the diseases of the eye, they are now studied as a regular and important part of surgery; a plan that is tending very fast to extinguish the superfluous race of mere oculists, who, whatever may sometimes be their manual skill, are by no means well qualified to put in practice the prin-

ciples, which a more enlarged view of disease would indicate, as proper for various morbid conditions of the organs of sight.

Now although, as I shall presently more particularly explain, physic and surgery cannot be completely disjoined, and the foundation, science, and common principles of both are the same; yet, by the custom of the profession, some diseases are allotted to the physician, and others to the surgeon, while particular cases form a sort of neutral ground, over which both parties travel, and where they occasionally meet, not always, I am sorry to say, in very good humour with one another. But, besides the efficiency, which surgery displays in checking, assuaging, or curing many forms of disease, thus put under her especial care, she lends a welcome assistance to nature in the repair of various mechanical and chemical injuries, which are entirely out of the province of the physician. The many skilful, scientific, and diversified plans adopted to promote the healing of wounds and burns; the union of fractures; the reduction of dislocated bones, or of other displaced parts; the liberation of entangled and strangulated bowels; the extraction of foreign bodies; the discharge and cure of abscesses; the stoppage of hemorrhage; and all the bold and clever operations performed for the removal of numerous states of urgent danger, or severe inconvenience, brought on by disease or accident, afford so many examples of ample portions of practice, where surgery alone prevails.

Gentlemen, our profession seems to have had an origin, which well deserves to be called noble; for the first practice of it arose from one of the most generous sentiments which nature has implanted in the heart of man, namely, from that sympathetic benevolence, which leads him to pity the misfortunes and sufferings of others, and inspires him with an anxious desire to alleviate them. Opportunities of gratifying this fine and virtuous disposition were never wanting. In the first ages of the world, man, in his destitute condition, was compelled to earn a truly precarious subsistence, either by force or stratagem, and, in the struggles, into which this sort of life unavoidably drew him, how was it possible for him always to have escaped wounds and other dangerous accidents? Wherever the chase was in vogue, as a source either of livelihood or amusement, wherever broils and contests occasionally arose, and man was the same animal which he now is, possessing a constitution and an organization liable to be impaired by the influence of a thousand causes perpetually near and around him, and as constantly in operation, there must have existed a necessity both for medicine and surgery.

Although in the remote times of antiquity, these avocations must have been very inferior, in point of science and efficacy, to what they now are, they seem to have commanded a high degree of respect. In one particular, indeed, the dignity of the profession then had a support, which it now neither enjoys nor requires; a support, derived from the illustrious birth and

rank of those, who took a distinguished part in the practice and cultivation of it. Our nobility have the merit of most liberally promoting the advancement of surgery with their purses, and of doing honour to human nature by the munificence with which they contribute to the foundation and endowment of hospitals; but none of them, I believe, handle the probe themselves, or aim at a practical knowledge of the subject, as one of their favourite accomplishments. What pleases them in this matter ought to please us also, and as they are very good patients, and might not make equally good surgeons, it is better, perhaps, that the present order of things should stand. We have medical and surgical baronets, but no lords or dukes, like the two other learned, and the military and naval professions. But, in the early periods of history, things were very different; for persons of the most elevated ranks then deemed it no degradation to apply themselves to medicine and surgery, and to administer, with their own hands, the succour, which an attention to these branches of knowledge enabled them to give; and such was the reverence, entertained for superior skill of this description, that the possessors of it received far greater honours than those which appertain to the modern peerage, the honours of being thought to be descended from the Gods, and of being allied to, or put upon an equality with Kings. Thus, Chiron, one of the earliest and most immortal characters in our profession, who flourished in the first ages of Greece, before the conquest of the golden fleece and the commencement of the Trojan war, was reputed to be the son of Saturn. Then the two renowned brothers, Machaon and Podalirius, who now have no other employment, than that of being the supporters of the arms of the Royal College in Lincoln's Inn Fields, were anciently very busy characters, both in war and surgery, and reputed to be sons of the god Æsculapius. Machaon married the daughter of Diocles, King of Messenia, and is sometimes conjectured to have been a king himself, either in his own right or that of his wife; for Homer, in two or three places, styles him "Pastor of the people," (*ποιμὴν λαόν*), a title which he gives to Agamemnon and other kings. At all events, Machaon was of exalted rank, and, what is equally important, beloved and honoured by the whole Grecian army, as much for his medical and surgical skill as his martial virtues. Hence, when he was wounded, the greatest solicitude was expressed about his fate, and especial commands given for his immediate removal to a place of safety.

If, then, surgery, in its earliest and quite unimproved state, had recommendations enough to gain the kind of notice and consideration to which I have alluded, what claims to public favour and confidence does it not now possess, when every part of it is cultivated with the most minute care, and every subject, which it embraces, teems with science and improvement? Is there an individual, whether the most powerful and wealthy, or the humblest pauper, that is not indebted to it, at some

period or another of his existence, for essential service, without which his life could not be preserved, or preserved only in a painful, crippled, disfigured, and valueless condition? Under these circumstances, what pleasure could the monarch have in his crown, or the rich man in his wealth? And would not the one be glad to exchange all his power and magnificence, and the other all his hoarded gold, for simple health? Many years ago, I heard this preference of health to wealth most feelingly expressed by a gentleman who returned from India with a fortune of 200,000*l.*, but a shattered constitution. "Give me back," said he, "my youth and health, with only a clean shirt on my back, and one guinea in my pocket, and I will cheerfully resign all the rest of my fortune."

Gentlemen, the sterling usefulness of surgery,—its plain truths and obvious facts,—its freedom from mystery and deception, are recognized by all capacities and all conditions; hence those who truly excel in it will be in little danger of not finding admirers and patrons in every country and in every clime. Shall I remind you, that, while distinguished skill in surgery has frequently been rewarded with the friendship of wise and powerful monarchs, even tyrants and savages have sometimes shrunk from the idea of hurting the possessor of so valuable a qualification? Those who have been most venturesome in the missionary service, and in the exploration of uncivilized regions, will attest the truth of some part of this statement, and history confirm the rest. We learn from Sully, that when that bigoted, weak, and bloodthirsty tyrant, Charles the Ninth, king of France, gave directions for the massacre of his protestant subjects, on St. Bartholomew eve, in the year 1572, the only person, professing the reformed religion, singled out by him for mercy, was Paré, the celebrated surgeon, who was ordered to be brought into the palace, and concealed, during the carnage, in the king's own water-closet. Now, whether this sanguinary monster considered to spare Paré, as is pretended, on account of his usefulness to the community at large, or, what is more probable, on account of his services being wanted for the tyrant himself, one thing is clear, Paré was saved in consideration of his professional merit, and the value of surgery remembered in the midst of all the ungovernable phrensy of the blackest superstition.

Louis XIV., who had experienced on his own person, the difference between good and bad surgery, and nearly lost his life from the mismanagement of an abscess, always felt grateful to the skilful practitioner by whom he was extricated from danger, and, at whose death, he was heard to say, with some emotion, "I have not only lost a good surgeon, but a valued friend."

The late emperor Napoleon, like all other warriors, knew that the company of a surgeon was often very desirable; he therefore always looked upon our profession with favour; and patronized every thing tending to improve the

hospitals, to which he would sometimes pay a personal and friendly visit. Thus, in Syria, when the plague was raging amongst his troops, and the medical officers scarcely dared approach the sick, Napoleon went into the hospital himself, where he conversed and shook hands with several of the patients; nay, on the same occasion, he actually assisted in the removal of the corpse of a gigantic soldier from one of the wards, copiously smeared as it was with the discharge from a gangrenous pestilential bubo. But, gentlemen, his estimation of the usefulness of our profession is shown, not more in his attention to hospitals, than in his long and steady friendship for his surgeon Larrey, whom he remembered with extraordinary kindness and gratitude in his will.

Having now noticed the antiquity and importance of surgery, and the respect which it commands from all classes of society, I may next solicit your attention more particularly to the meaning of the term, which, according to its etymology, must be set down as the method of curing the diseases, injuries, and deformities of the body by manual proceedings, or things done with the hand. But, to have so narrow a view of the duties of a modern surgeon,—to define surgery, as some writers have done, the "mechanical part of physic,"—and to imagine, that a surgeon ought to be prohibited from prescribing internal remedies, are absurd and false notions, arising from ignorance of the nature of the animal economy, and of various important circumstances in the history of disease. Such ideas, I am almost ashamed to say, have existed within the period of my own recollection, and were once so far acted upon in one of the hospitals of this metropolis, that the apothecary dared not compound the surgeon's prescriptions, without the consent of the physician. Indeed, at St. Bartholomew's hospital, when I was a student, the surgeons were considered as trespassing, most sinfully, against the prerogative of the physicians, if they directed any internal medicines but mercury, bark, opium, and the house-physic! Such days have passed away, and similar events are not likely to return. Every man of common intelligence and liberality now recognises surgery, not merely as an art, in which mechanical skill is often necessary, but as a science, founded, like the other branch of medicine, upon the knowledge of the structure and functions of the human body; upon the right comprehension of the laws of the animal economy, as a whole system or combination of organs, acting in union for the maintenance of life; upon the observation of the causes, which bring about changes of structure, or impairment of function; and, upon a just estimate of the power and fitness of every description of therapeutic means.

Even the portions of surgery, which are in some respects mechanical, ought to be under the guidance of scientific principles, generally deduced from anatomical, physiological, and pathological considerations. The reduction of dislocations is frequently deemed a true speci-

men of the mechanical nature of surgery; and so was the treatment of fractures not very long ago; for Percival Pott once heard a judge on the bench express his decided belief, that an ignorant country bone-setter understood the management of a broken leg fully as well as the best surgeon in England. This judge, we must have the charity to suppose, was a better judge of law matters than surgery. Now, I do not admit, that the reduction of a dislocation is simply a mechanical proceeding:—at all events, it is not so, when any difficulties occur. In this case, we consider what produces these difficulties. We probably find, that they arise from the number, strength, and resistance of the muscles, and we try to overcome the particular muscles concerned; sometimes by relaxing the most powerful of them, sometimes by tiring them out by means of gradual, moderate, but unremitting, extension, made in a direction dictated by anatomical science, and assisted by employing the shaft, or body, of the bone as a lever for moving the head of it back into its right place again. These plans not answering, we have recourse to measures, by which the whole muscular system is rendered weak and incapable of resistance, and the bone is then easily reduced. We see, then, that the operation of reducing a dislocation is not always a simple mechanical business, but that it requires attention to other principles, without which the attempt would fail, whatever mechanical force were employed. But, though surgery may be maintained to be a science as well as an art, it is not a science that can flourish or even exist independently of the rest of medical knowledge. Immediately you detach it from the mass of diversified information, upon which every sound and well-established doctrine in our profession is founded, it withers and decays, like the branch of a tree that has been severed from the trunk. It becomes, at once, the contemptible barber-surgery of the dark ages, no longer meriting the name of a scientific and rational pursuit.

Gentlemen, you will understand from what has been already said, that *anatomy* and *physiology* must constitute a principal, and an indispensable portion, of that foundation, to which I have alluded. The first, sometimes denominated the science of organization, makes us acquainted with the external qualities, the situation, connexions, and inward texture of the organs composing the human body. The second, or physiology, contemplates these same parts, as they present themselves in action, and under the influence of life, displaying to us their functions, and revealing, as far as these interesting secrets can be disclosed, all the vital phenomena. Anatomy and physiology may be considered then as the two sciences, showing the structure and functions of the body in the healthy and natural state. Without the light of these sciences, all would be obscurity, confusion, and pell-mell work, both in medicine and surgery; and to expect any other result, would not be less presumptuous, than to fancy it possible to repair the

most complicated machinery, like that of a watch or steam-engine, without any knowledge of the arrangement and uses of the various contrivances in those beautiful specimens of human ingenuity. In fact, with respect to complexity, no work of art is at all equal to the animal machine. Without the light of anatomy, gentlemen, I cannot conceive how you could advantageously begin the study of surgery, or find it interesting and intelligible. Yet I have sometimes heard of gentlemen paying heavy fees for hospital attendance, who had never been in a dissecting-room, or at an anatomical lecture, in their lives. Under this disadvantage, they must have been quite unprepared to collect any desirable kind of information from what was before them; and their plan, as beginning the profession at the wrong end, was positively a waste both of time and money. Let me caution you, gentlemen, to avoid this serious mistake, and let me advise you to direct all your zeal, in the first instance, to the study of anatomy, as an indispensable step to be taken, before you can enter upon the consideration of either medicine, or surgery, with any prospect of success. But, if your time and arrangements will not permit this wise course to be followed, be sure to take the next best road, and let the study of anatomy, at all events, accompany that of surgery.

Besides *anatomy* and *physiology*, which are branches of the natural history of man, absolutely essential to the very existence of medical and surgical science, I must recommend to your attention, gentlemen, the important subject of *pathology*, or the study of the human body under disease. To pathology belong the examination and consideration of the various alterations produced by disease in the texture, consistence, form, relations, connexions, functions, and even in the existence of organs, which sometimes disappear, or are destroyed. *Morbid anatomy*, one of the most important subjects to which you can pay attention, on account of the light which it has thrown, and is continuing to throw, on the nature, causes, and effects of disease in general, forms one branch of pathology, but is by no means synonymous with it, because pathology relates to diseases of every kind, whether involving structure, or function, or both; whereas morbid anatomy is concerned only with those diseases which are accompanied by a perceptible alteration of structure.

Medical science, besides directing her admirable power to the relief and cure of disease, does all she can to prevent its occurrence. She combines, therefore, with her other valuable attributes, the *art of preserving health*; which implies the faculty of making an accurate calculation of the effects of every surrounding influence upon the organization, functions, and constitution of the human body. This study directs us to the most likely means of keeping every part of the system free from disease, and thus of prolonging our existence. In particular, it leads us to comprehend how

the great animal and vital functions, whose united, regular, and free continuation is the "sine quâ non" of health, are most likely to be preserved from derangement and interruption. I need not inform you, gentlemen, that, as surgeons, you will often be consulted about the most advisable plans for the prevention of some apprehended complaint, to which there may be a predisposition; and not to be able to answer questions put to you upon the subject, would be seriously detrimental to your professional reputation and interest.

Finally, one other fundamental requisite in medical and surgical science is the knowledge of *therapeutics*, or of all those plans and means which are adapted to the relief, or cure, of the injuries and diseases of the human body. It takes into consideration, therefore, the subjects of *diet* and *regimen*, the virtues and peculiar effects of different *medicines*, and the doses and forms in which they ought to be prescribed. Therapeutics also necessarily comprise *manual operations* and *local treatment*.

Now, when I add to the foregoing statements, that much progress cannot be made in physiology and therapeutics, without the aid of *chemistry*, *botany*, *comparative anatomy*, and *natural history* in general, it must be granted, that an accomplished physician, or surgeon, ought to have a head of extraordinary capacity; in truth, he ought to be such a man as is not frequently met with.

Besides all this mass of knowledge, which it is either desirable or absolutely necessary for him to possess, he can never shine as a practitioner, unless he have likewise the advantages of genius and experience. Genius alone, without experience, would only be as a wild and unprofitable fertility—mere experience, without genius, absolutely a barren possession. Opportunity without talents, and an aptness to take advantage of it, is really not of more use than light to a blind man. On the other hand, splendid abilities, without experience, can never make a consummate surgeon, any more than a man, with the greatest genius for painting, can excel in this particular art, without having examined and studied the real objects which he wishes to delineate.

With the numerous qualifications which I have specified, the surgeon should possess a steady hand, a good eyesight, and a firmness of nerve not likely to be shaken by sudden and unforeseen difficulties, nor by the cries and unavoidable sufferings of the patient. Whatever may be the state of things, the surgeon's want of coolness and composure cannot fail to render them worse.

This undisturbed coolness, which is even more rare than skill and talents, is a most valuable quality in practice. Dexterity may be acquired by exercise, but firmness of mind is the gift of nature. Haller, to whom she was so bountiful in other respects, was denied this advantage, as he candidly confesses:—"Although," says he, "I have taught sur-

gery seventeen years, and exhibited the most difficult operations upon the dead subject, I have never ventured to apply the knife to a living person, through the fear of giving pain."

Gentlemen, medicine and surgery are so rigorously parts of one and the same science, that no criterion has yet been suggested by which their line of separation can be unequivocally determined. This kind of division, recognised by physicians and surgeons, is quite an artificial one, which, though it may serve purposes of convenience in practice and the teaching department, can never extend to the science itself. Arbitrary custom may give one class of patients to the physician, and another to the surgeon, or midwifery practitioner; one lecturer may explain this case, and another that; but the right treatment of all diseases will ever be conducted according to the same general rules, and every man who understands them, and the broad foundation upon which they are established, is in possession of knowledge applicable to the whole field of practice.

Is it then at all surprising, that the legitimate subjects of surgery should remain unsettled, and the boundary between it and physic continue a matter of endless dispute? As long as the world exists, this matter, I think, will never be decided. The attempt seems to me as impracticable, as the proposal made by Lapeyronie to one of the French ministers, in the reign of Louis XV. "There ought," says he, "to be a wall of brass erected between physic and surgery." Now this Lapeyronie was really a character of great and distinguished merit, a man, in whom you would not have expected such a prejudice: he signalized himself, not only as an eminent practitioner, but as one of the founders of the Royal Academy of Surgery in France, which he endowed with his own private fortune. Possibly, the idea of a brazen wall, between physic and surgery, might have been dictated by his zealous feelings—a sort of *esprit du corps*; be this as it may, the wise statesman, to whom he addressed himself, was more cool-headed, for he immediately inquired, "On which side of the wall it was intended to place the patients?"

According to the crude notions of some writers, the object of physic is the cure of *internal* diseases, and that of surgery, the cure of *external* ones; but do we find this suggestion acted upon in practice, and, if it were so, would it be rational and useful? In answer to this question, I may remark, that it is not acted upon, and that if the attempt were made, it would not promote the improvement of the profession, but have quite the contrary result, bringing back the dark ages of physic and surgery and extinguishing the sunshine, which, at present, sheds its salutary influence over every part of medical science. Neither would such a division be consonant to reason, inasmuch as no essential difference prevails between the internal and the external parts of the body, in relation either to their general organization,

or their general pathology. We are to remember, gentlemen, that, notwithstanding the considerable number of organs, the elementary tissues composing them are few, and that all living parts contain arteries, veins, nerves, and absorbents, in various proportions, connected together by cellular membrane, which is, as it were, the anatomical thread, that sews and binds every fibre in its right place. The peculiarities of different structures depend, then, not so much upon varieties in their supply of vessels, nerves, and their connecting medium, as upon the addition of some elementary constituent substance of less general distribution.

As the animal machine presents only one system of anatomy, so it has in it only one regular and intimately-connected system of physiology. Each individual organ performs the particular office allotted to it by nature; but, its functions are not independent of those of other parts. Sometimes different organs are associated, or mutually connected, by contributing to the same purpose in the animal economy. Thus the heart and lungs are associated in the function of respiration; the liver and stomach in that of digestion; the womb and breast in that of continuing the species. But, besides this reciprocal connexion and feeling between different parts, united in and contributing to the same function, we find other sympathies existing between organs, not referrible to any such principle. These wonderful and mutual influences of parts of the body over one another; this reciprocal connexion, and as it were, intelligence between them, are chiefly brought about through the action of the nervous system. But, we know not, nor probably shall we ever know, the rationale of these curious and secret operations in the animal economy.

As long as the human constitution is of this nature, the proposed division of diseases into external and internal, can neither be useful nor scientific, and, in the words of Richerand, it would not be less absurd than giving the disorders of the right half of the body to the physician, and those of the left half to the surgeon; for there are not two pathologies, one for the superficial and another for the deep-seated parts.

Yet it is curious that in France, the very country in which these just sentiments were first promulgated, we still hear of the pompous and nonsensical titles of professors of external and internal pathology. These would be fine appellations for Dr. Elliotson and myself, at this University, and well calculated to imply something extraordinary; the very sound of them, I think, would make me send in my resignation.

As might have been anticipated, these professors of external pathology often dive pretty deeply into the body; in fact, quite as deeply as the professors of internal pathology, who, oddly enough, sometimes exercise their skill on its surface. Who can regard, as external diseases, stone in the bladder, retention of urine, disease of the prostate gland, extraneous

cartilaginous formations in the joints, necrosis of the humerus or femur, extravasation of blood in the head from external violence, cancer and polypi of the womb, and all abscesses, however deeply placed! Yet custom puts all these examples under the care of the surgeon, and, in opposition to common sense, they are called, in French phraseology, a part of the domain of external pathology.

These examples prove, that the internal situation of a disease is a circumstance which, abstractedly considered, does not necessarily withdraw the patient from the surgeon's list, and transfer him to that of the physician, any more than certain cutaneous diseases, and certain painful nervous affections, must always be taken out of the hands of the physician, merely because the surface of the body is the seat of disorder.

Many cases, attended with external swelling, cutaneous affections, ulceration, and other changes on the surface of the body, arise either from disorder of internal organs, or from diseases which depend upon some particular state, or derangement of the whole constitution.

Thus, the well-known gangrenous tumour of the cellular membrane, called carbuncle; the rapidly spreading redness of the skin, termed erysipelas; and the inflammation of the fibrous textures about the joints, the effect of rheumatism and gout; have a deeper and far more extensive source, than the parts in which they actually present themselves.

In a lumbar abscess, the matter is originally formed in a very deep situation in the cellular membrane behind the peritoneum, and it is not till a certain quantity of it has been produced, that a swelling is observable above or below Poupart's ligament. Here, then, we see an internal disease with an external swelling; but, though the affection be originally an inward and a deeply-seated disorder, and one likewise generally connected with disease of the constitution, the case belongs, by the agreement of the profession, to the surgeon, and not to the physician. Similar reflections apply to aneurisms and ruptures, which, though they lead to the formation of external swellings, commence with disease, injury, or displacement of internal organs.

In some of these cases, no doubt, another principle has the chief influence in referring them to the surgeon, namely, the frequent necessity for manual proceedings, or an operation for their cure. As if, however, nothing were to be consistent in the decrees of custom upon this subject, some other cases, accompanied by external swelling in a remarkable degree, and generally, too, requiring an operation, are, with the exception of what relates to this manual interference, usually regarded as belonging to physic. Need I remind you, gentlemen, of several forms of dropsy, as illustrations of what has been observed?

After these explanations, I may be brief on the scheme of letting the arrangement be founded on the consideration, whether a disease be a general or a local one. In numberless

instances, general diseases, which it is proposed to refer to the department of physic, commence as local ones, and afterwards extend to the whole system, only because they have not been efficiently treated in their early stages. The venereal disease is at first completely local; and often, when it is well treated in its commencement, the original sore heals up favourably, and we may never afterwards notice in the patient's condition any proofs of the syphilitic poison having extended its influence over the system; but, under less successful management, it becomes a terrible constitutional disease. Now, let the internal and external pathologists remember, that the complaint, in all its forms, belongs invariably to the province of surgery. Syphilis, in truth, would have been quite as eligible a supporter for the College arms, as either Machaon or Podalirius. Gentlemen, the sympathies existing between the numerous organs of the human body will rarely suffer any disease to remain long a strictly local affection.

I have always felt a just contempt for invidious comparisons; it is impossible for me, therefore, to admire the occasional attempts to raise surgery, by decrying physic. Will it be credited, that some enthusiastic men have ventured to define surgery, "*quod in medicina certum*," as if the rest of practice were all random work, performed in the dark? This spirit can only be entertained by those who know nothing of physic, and of course, little of scientific surgery. In operations, it is true, the knife may be employed, so as to do what is intended, with almost mathematical precision and success. But, surgery does not consist merely in operative proceedings; and, amongst other things which come within its scope, is the duty of ascertaining the nature and real condition of a considerable number of diseases and accidental injuries. Here the surgical practitioner will often find himself surrounded with doubts and difficulties, all certainty being sometimes out of the question. On the other hand, the physician who prescribes quinine for the cure of an ague, is generally as sure of success, as the surgeon who practises a manual operation.

One of the surgeons of St. Bartholomew's Hospital, at the time when I was student there, used to take pleasure in saying, particularly if any of the doctors happened to be near him, that, if his son turned out to be a clever fellow, he would bring him up to surgery, if a blockhead, to physic. I believe in the end he was brought up to nothing. Now the man, who made this invidious remark, though a surgeon of St. Bartholomew's Hospital, was entirely destitute of medical science; and how could we expect the fact to be otherwise, his own sarcastic estimate of the little talent necessary in a physician being a full proof of his ignorance.

In ancient times, no division of practice was attempted. The same men, who practised what is now understood by physic, devoted themselves equally to surgery. The writings of Hippocrates, Galen, Celsus, Albucasis, and

others, comprehend, promiscuously, matters relating to both subjects. These venerable authorities had no conception that practice could be divided into two departments, the preparation for one of which required different studies from those called for by the other. In times of antiquity, then, the followers of our noble and useful profession corresponded to what are now called general practitioners; a class, who, for various reasons, will always have under their care the largest share of disease. From the year 640, the period, when the standard of Mahomet was planted on the walls of the capital of Egypt, until the close of the 14th century, the progress of all the arts and sciences was suspended, and a great district of the world involved in darkness and ignorance. Such records of learning, however, as could be preserved from the fury of the Saracens and other barbarians, were examined and studied by the members of the ecclesiastical profession, the only persons, who, in those dismal times, knew any thing of languages or literature. In this manner, the priests obtained a superficial knowledge of physic, the practice and emoluments of which they very cheerfully combined with the advantages of their holy calling.

Gentlemen, these historical facts deserve your particular notice, because it was the accidental connexion of the church with physic, that afterwards led to the detachment of surgery from the other branch of medical practice, and the division of the profession into physicians and surgeons, as at present established in this and other civilized countries.

Under the pretext, that the church abhorred the shedding of blood, (*Ecclesia abhorret a sanguine*), a maxim never acted upon, except in this instance, by the Church of Rome, the Council of Tours, in the year 1163, prohibited the clergy, who then shared with the Jews the practice of medicine and surgery, from undertaking any bloody operation. The immediate result was, that surgery was transferred to the laity, the generality of whom, in those times of barbarism, were plunged in the lowest ignorance.

The surgical knife was now handled by a set of menials, acting under the direction of their masters, the priest-physicians, who generally selected, for such duty, the keepers of baths and others, whose proper instrument was the razor. Here then we see the origin of physic and surgery as distinct vocations, and the first cause of the disgraceful association of the latter profession with the barbers; a connexion that was kept up in this kingdom as late as the year 1745. The church not only had a tender conscience about the shedding of blood, and a relish for clean hands, but also a becoming squeamishness about female disorders and lues venerea. The surgeons have ever since been fortunate to keep fast hold of Syphilis; but, with respect to the ladies, I am sorry to say, we do not monopolize them entirely, the physicians of the present day being, it is to be presumed, a smarter and more gallant race than the denure medical priests of the dark ages.



An interesting question now presents itself—has the division of the profession, into physicians and surgeons, assisted or retarded, its improvement? This is a point, on which it may be difficult to give a ready answer. Perhaps I should be justified in saying, that the division of practice, the division of labour, has had good effects, particularly when such division was exercised by men, who had the same foundations, and began their respective careers, enriched from the same stores of science; for, gentlemen, if I am certain of any thing, relative to professional education, it is that medical and surgical practitioners should all go through precisely the same elementary studies. Thus far I concur with many enlightened members of the profession; because, in whatever way the question, about the division of practice, may be disposed of, the unity and indivisibility of the science itself must continue. But I completely disagree with those who seem to desire nothing less than the annihilation of the physician and regular surgeon altogether. Human life is not long enough, and human faculties are not powerful enough, for any one man to attain, in both departments of the profession, the point of perfection, to which the talents and industry of many generations have now brought them. Had he the longevity of a patriarch, his time would yet be insufficient for so ambitious a purpose.

I calculate, that the young physician and the young surgeon, who mean to reach the temple of fame, ought to commence their journey and travel together many miles along the same road; but that, when they have proceeded a certain distance, they must diverge a little, each taking the path leading to the summit of that branch of practice to which he is particularly devoted. Each carries along with him, however, the knowledge both of physic and of surgery; and each is endowed with all that variety of information, which I have represented as forming the basis of medical science. For my own part, I should never have any confidence in a physician ignorant of surgery; nor is it possible to suppose any man, entitled to the name of a surgeon, who knows nothing of physic. Gentlemen, there are a few other topics which I intended to bring into this Lecture; but as I have already encroached a great deal on your time, I will reserve them for the lecture to-morrow evening.

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#### PROFESSOR LIZARS ON THE EXCISION OF HEMORRHOIDAL TUMOURS.

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*To the Editors of the London Medical and Surgical Journal.*

GENTLEMEN,

As the clinical lectures of Dupuytren, given in your independent Journal, present views on the nature and treatment of piles, differing somewhat from the results of my own experience and research, I request you to insert the following remarks.

The veins of the rectum, destitute of valves, and constantly exposed to have their circulation deranged by the evacuation of hardened feces, frequently become dilated or varicose; and this, in the opinion of the celebrated Parisian professor, constitutes the hemorrhoidal tumour. But from numerous pathological investigations, from injections of the veins, &c., I have been led to the conclusion, that venous dilatation is merely a primary part, and that though the blood is sometimes found coagulated and fibrinous in the veins, yet in general the process of nature in the forming of such a tumour seems to be—vein or veins swollen and ruptured, blood effused and coagulated, and the cellular tissue distended and indurated.

The tumour is readily reducible as long as the blood remains fluid within its vessels; but it is no longer so, nay it is even scarcely removable by absorption, when coagulation has taken place.

The neglect of this stage is attended with very troublesome results; the neighbouring vessels become excited, the cellular tissue is indurated, forming a distinct cyst, and the delicate mucous tissue of the rectum is converted into a highly vascular and irritable membrane, which bleeds on the slightest excitement. Nor are degenerations of the mucous and other glands, stricture of the gut, abscesses or fistule, uncommon sequences.

Though the treatment proposed by the Baron, viz. excision of the diseased mass, is not a new practice, yet, as far as he is concerned, it has undoubtedly all the merit of originality. It is noticed by several of the older anatomists and surgeons, is minutely described by Hey of Leeds, John Bell of Edinburgh, Salmon of London, Kirby of Dublin, and Fletcher of Gloucester. I myself have, for many years, practised it with the happiest results, as can be testified by Dr. Sanders and other distinguished medical friends, who have called upon me to operate in such complaints.

My plan of performing the excision differs, however, from that of the Baron; and I think that the modifications which I have introduced so simplify the operation, that any young practitioner may perform it with perfect confidence.

As a preparatory step, the bowels are opened by some gentle aperient, and next morning we proceed, provided with the following apparatus:—a straight bistoury, a quadruple hooked forceps, and a piece of sponge of conical shape, and about three inches long, covered with lint well larded, and having a piece of tape fixed to its base.

The patient is placed in a reclining posture on a bed or sofa, with his nates on the margin, and a pillow between his knees. The surgeon having cautiously introduced one limb of the forceps into the anus, in order to obtain a firm hold, secures the tumours on the one side of it; he next grasps those on the other side, and drawing the whole towards him, applies the bistoury at the exterior of the swellings, and, by a circular incision, insulates the extremity of the rectum from its cutaneous attachments;

then gently elongating the gut, he takes away the morbid structure. In the female, it is advantageous to begin the incision at the perineum, to avoid injuring the support of the vagina.

The diseased mass being removed, he introduces the sponge into the rectum. A towel is now applied as a compress, and a couple of handkerchiefs in the form of a T bandage. The patient being put to bed, has an opiate administered to him, and a nurse appointed to watch, lest hæmorrhage should ensue; but this has never happened where the compress just described was employed, although I have performed the operation on young and old, of either sex, and in some so like the *exanguis umbra*, that the small quantity of blood necessarily lost in the operation might seem to endanger life. Even they, however, by the stopping of the habitual bloody discharge, quickly rallied, and were soon restored to the best of health.

Dupuytren and others, who to prevent hæmorrhage had recourse to the actual cautery, employed an exceedingly painful, and, according to their own showing, a much less successful method: ligatures on the arteries have not proved more effectual; nor is this remarkable; it is not the loss of arterial, but of venous, blood that is to be dreaded.

Retention of urine may come on immediately after the operation, and continue till the sponge be discharged; but this is not a frequent occurrence, even where it might be expected, as when the prostate gland is diseased. The prepared sponge comes away easily within sixty hours after its insertion, and the bowels may be then opened by a little castor oil; after which the diet, necessarily low from the time of the operation, may be made more liberal.

The subsequent treatment is very simple. Nothing more is requisite than a little lint oiled or spread with cerate, applied to the wound, a T bandage, and washing with tepid water after every alvine evacuation. In a few cases, constriction of the anus is threatened, which is removed, or rather prevented, by the occasional introduction (once or twice a week will suffice) of a rectum bougie, or common candle. This is to be continued till the aperture becomes of its normal size. Where prolapsus ani is conjoined, the diminution of the orifice is favourable; it forms part of the radical cure.

The ingenious Baron will receive these observations as amicably as they are offered; I trust that such will long be the only kind of contention between France and Britain; in this field victory gives life, and enriches both the conquered and the conqueror.

I am, Gentlemen,

Your very obedient servant,

JOHN LIZARS,

Professor of Surgery to the Royal College of Surgeons, and Surgeon to the Royal Infirmary, &c. Edinburgh.

October 2d, 1832.

## A LECTURE

AT THE COMMENCEMENT OF THE COURSE ON

### MATERIA MEDICA,

BY JOHN EPPS, M.D.

At the Westminster Dispensary, 9, Gerrard Street, Soho, being an Examination of the Operation of

### BLOOD-LETTING,

Delivered October 2d, 1832.

It is usual to give what is called an Introductory Lecture at the commencement to the course; and the lecture, thus particularized, is generally a mass of grandiloquent expressions, adorned now and then with scraps of poetry, seasoned occasionally with a little Attic salt, and enlivened at intervals with some jokes, good, bad, or indifferent. The result has been that an introductory lecture is looked upon as a species of quack advertisement. This association is, unfortunately, too well founded; and from this, and also from the conviction, that such a lecture is best introductory that sets the student at once at work, I feel it most consonant to proceed, after a very few prefatory observations, to the *examination of blood-letting* as a therapeutic agent.

*Materia Medica* is a term that a little reflection will show is relative. It implies the existence of certain deviations from that condition, or those conditions, constituting health; these deviations, as manifested by symptoms, being commonly called diseases. The Creator has kindly provided us with means by which we are enabled to alleviate, if not to overcome, these diseases, which means we call remedies, and these remedies, taken in the aggregate, form what is called the science of *materia medica*. These means are also called therapeutic agents. They are peculiarly our province, and, during the course to be delivered here, I shall endeavour to communicate all the information regarding them, necessary for their proper use.

Among these, *blood-letting* stands pre-eminent, and to this first I propose to draw your attention, as affording me an opportunity to exhibit some views which, being understood at the outset, will save much time to us during the course, by rendering unnecessary frequently repeated explanations. The remarks I shall now make may, with propriety, be entitled "An Examination of the Operation of Blood-letting."

In developing the nature of this remedial agent, it will be my duty to advance opinions, which may be considered in opposition to the generally received tenets upon the operation of blood-letting. In advocating my own opinions, I trust that I know the boundary that modesty affixes; and, at the same time, feel encouraged by the belief, that the day has now

arrived when long antiquity will no longer give credit, or great names give credence, to opinions, not bearing in themselves marks of their intrinsic accuracy. And let me intreat you to remember, that it is as much our duty to throw off the yoke of prejudice and erroneously founded opinions, as to put on the yoke, implied in true and sincere obedience, to the great natural truths, written for our instruction, upon the fair volume of creation. Indeed, I trust that every student here will cultivate that philosophic spirit, which has been so beautifully described by Dr. Thomas Brown: "which knows how to distinguish what is just in itself from what is merely accredited by illustrious names, adopting a truth which no one has sanctioned, and rejecting an error of which all approve, with the same calmness as if no judgment were opposed to its own; but which, at the same time, alive, with congenial feeling, to every intellectual excellence, and candid to the weakness, from which no excellence is wholly privileged, can dissent and confute without triumph, as it advances without envy, applauding gladly whatever is worthy of applause in a rival system, and venerating the very genius which it demonstrates to have erred."—*Philosophy of the Human Mind, Lecture I.*

Cherishing such a spirit, gentlemen, let us enter upon the consideration of blood-letting. It is hardly necessary to specify the importance of every practitioner having correct views on the operation of this powerful remedial agent. The blood itself is, in itself, so important, being so intimately connected with the life of the individual, as to cause every reflecting mind earnestly to desire a knowledge of the circumstances under which its removal will, as being necessary, be beneficial.

In considering blood-letting, the following plan will be adopted; first, to enumerate and define the different modes under which blood-letting is performed, and to justify the terms used; second, to show the importance of the nervous system, and the necessity of looking to it principally for a solution of the effects arising from blood-letting, (and, under this head, an attempt will be made to demonstrate that a modification of the nervous system always precedes the inflammation of any part; and, also, that the common mechanical explanations of the effects of blood-letting will not account for the phenomena;) third, to consider the different modes of blood-letting, their individual and relative advantages; fourth, to conclude with some general remarks.

In reference to the first subject, the different modes of blood-letting, I shall adopt the arrangement of M. Latour, to whom for many interesting views I am much indebted, namely, *venous* blood-letting, commonly phlebotomy; *arterial* blood-letting, or arteriotomy; and *capillary* blood-letting. This arrangement I consider scientific and consequently useful. Each differs much from the rest; one being applicable where the others are not, and *vice versa*, as will be hereafter fully seen.

It may be a cause of wonder, that the com-

mon phrases of "general" and "local" blood-letting have found no place in this arrangement. And it may still more increase your wonder, when I state, that the reason why I have excluded the same, is that I do not believe in the existence of the states expressed by these phrases, or, rather, I should say, commonly understood and indicated by them. My reasons for this disbelief will appear hereafter, or rather, I should say, the reasons of my belief, that the one is not more general and local than the other, will be stated.

Phlebotomy I need hardly intimate refers to blood-letting obtained by cutting a vein, arteriotomy to blood obtained by cutting an artery, and capillary blood-letting to blood obtained by cutting or wounding the small vessels, called capillaries. Scarifications and cupping may be considered as modifications of the whole.

These few remarks lead me to the second subject, namely, the importance of the nervous system, and the necessity of looking to it principally for a solution of the effects arising from blood-letting.

The nervous system is that which forms the grand distinctive feature of man. It is that which, to adopt rather an unusual expression, mans him. The other systems, the vascular, the muscular, and the lymphatic are merely forms for the development of the important functions of the nervous; they are the servants to fulfil its high behests, and the comparative and superior complications in these systems, as possessed by the human being, are merely to bring them into the condition suited to fulfil the duties connected with the superior complexities of the nervous system. They are dependents upon the bounty of the latter. The heart cannot beat, the lungs cannot expand, the ribs cannot be raised, the diaphragm cannot contract, the stomach cannot digest, the lacteal vessels cannot absorb, the limbs cannot move, the blood vessels cannot carry forward their contents, in fact, nothing in the human machine can be done unless the contributor, the nervous system, bestows the necessary supply of nervous energy. In fact, it is the *vis a tergo* that puts into action the inertia of dormant life.

These are undisputed facts; yet, strange to say, the importance of the nervous system has been much overlooked by practitioners, in the treatment and pathological examination of diseases. I do not mean to say that we do not hear a great deal about the "nervous system;" far from it. Indeed, I am sorry to be obliged to acknowledge that many, too many, talk of it, who know it not; and, what is worse, look to it as one of the principal loopholes of retreat for ignorance to escape at. The only excuse that can be pleaded for this overlooking of the nervous system, is the vagueness, till of late years, connected with it.

The day of vagueness has now passed. The discoveries of Bell and Magendie have established the existence, in reference to the parts now strictly called nerves, of *three* classes of nervous fibres, the *motor*, the *sensitive*, and the *respiratory*. And the still grander discoveries

of Gall and Spurzheim have demonstrated, that the different parts of the cerebral system have functions widely different, associated with the individual parts, its components.

In conclusion, let us remember, that to understand the agency of blood-letting, we must not forget the nervous system.

It is in inflammatory states of the system that blood-letting is principally employed. It will be hence necessary to view these states, in reference to the nervous system.

In inflammation, almost all allow that there is a congestion of blood in the vessels of the part inflamed: the said congestion being the result, according to one class of medical philosophers, of increased action; according to another, of diminished action. But here, in the warmth of the disputation, an error has crept in. It is the supposition that this congestion is the first consequent from the application of the body applied antecedent to the diseased effects, called a *cause*. Now, gentlemen, a little reflection will convince any one that this congestion must be, and is, preceded by a modification of the nerves of the part, of which the inflammation is the seat; a modification, in most cases, indicated by pain. I say this modification takes place in the first instance; for what can determine the flow of blood to a part, one of the phenomena coincident with inflammation, without the nervous system, associated with that part, being previously modified by the application of the exciting cause? Ask the physiologist what is the object of the inflammation set up in the part. He will state that it is an attempt of nature to rid herself of some foreign body, or to resist some noxious influence. But do the vessels, or does the vascular tissue tell that a foreign body or a noxious influence is or has been intruding or applied? Are not the nerves the informants? surely. Then, gentlemen, if a modification of the nerves of a part, afterwards brought into a state of inflammation, is the first invariable consequent of the antecedent body or influence applied, the cause; and if a flow of fluids to the part thus affected is dependent upon this modification of the nerves, it must be necessary, in order that we may properly appreciate the principles upon which the beneficial effects of blood-letting are dependant, that we should look, and that continually, to the nervous system for a solution. We must, in other words, understand how blood-letting acts upon the nerves in the way necessary for the removal of the inflammation. And, gentlemen, when to this we add the additional fact, that as the relief produced by bleedings must be, not from the mere emptying the vessels, but from the removal of the condition occasioning the congestion, we must be more and more convinced of the necessity of not looking, in our therapeutic studies and proceedings, upon the nervous system, either as a terra incognita, or as a land of mysteries. This modification I shall, in future, designate as the *organic cause*.

In order still more fully to establish this

view, I shall now draw your attention, gentlemen, to the different explanations that have been given of the agency of blood-letting; explanations connected, in a great measure, with the mechanical principle, the removal of the congestion, the inaccuracy of which will be pointed out in our progress.

There are four explanations that have had each one its own advocates of the beneficial effects of blood-letting; these are *derivation*, *revulsion*, *depletion*, and giving a *shock to the system*. By derivation, is meant the effect produced when, for instance, in an affection of the head, we bleed in the jugular vein. Revulsion, when, for the same affection, we bleed in the vena saphena at the foot; the former is bleeding *near to*, the latter *distant from*, the part affected. Depletion is the mere emptying the vessels, of blood.

The three first of these are conceived fundamentally to act mechanically, by relieving the congestion, by emptying the vessels of the part. The vessels considered to be relieved are the capillaries, or those small vessels situated between the terminations of arteries and the beginnings of veins. They are considered to be directly emptied by opening the vein having origin from them; and that, when thus emptied, a quantity of blood is drawn to these vessels to supply the blood evacuated. A current being thus established, the blood destined for other parts of the system is drawn to that to which the lancet is applied. In this explanation, you perceive that the nervous system is totally left out; and even allowing the explanation to be so far, as the emptying of the capillaries, correct, which, however, I dispute, its complete accuracy is invalidated by the circumstance of the disregard of the nervous system.

Let us now examine the process of phlebotomical blood-letting with the view of showing that mere derivation, mere revulsion, or mere depletion, cannot account for the phenomena connected with the beneficial operation of blood-letting. A ligature is applied, we will say, round the arm. What happens? The superficial veins, the deep-seated veins, and the brachial artery, are compressed. The blood in the veins is prevented a free return to the heart; the blood from the heart is prevented a free ingress into the fore-arm. The fore-arm swells; the vessels become distended. We open the vein, one of the medians; the blood flows; a current, say the mechanists, is established, and a derivation from the diseased part is occasioned. This, however, does not follow; for previously to this conclusion being justified, it must be proved, that the quickness with which the fluid circulates in the brachial artery has augmented not only in the direct ratio of the diminution of diameter occasioned by the ligature, and also, that the quantity of blood which leaves, by the opening reunited to that proceeding to the heart by the deep-seated veins, was, in a given time, more than that which, without the operation, would in the same time have traversed the fore-arm.

Yet this is called derivation, and this derivation is promulgated as the state produced which causes the benefit. But is it not evident that the capillaries remain in the same state as they were before? They are filled as soon as they are emptied; and, what is more, we find that benefit is derived during the operation, even when the ligature is applied.

And, indeed, the question occurs, Do not the capillaries remain congested after the bleeding as before? Does the swelling vanish directly the bleeding is done, or does it diminish as it is going on?

As illustrative of the idea connected with the operation of revulsion, its advocates urge the greater advantages derived in cephalic diseases from bleeding in the vena saphena than from the median cephalic or median basilic; and also (what they assert to be a fact), that bleeding in the foot produces abortion sooner than bleeding in the arm. Though the idea of revulsion is introduced here, you perceive, gentlemen, that the mechanical idea of emptying the vessels is still carried on. With regard, moreover, to the superior advantages in cephalic diseases obtained by bleeding from the foot, there exists some doubt; and, with regard to abortion being produced by bleeding in the foot more than by bleeding in the arm, the fact is disputed by many.

But taking the fact for granted that bleeding from the jugular is beneficial, and superiorly beneficial, in affections of the head, let us examine the process of bleeding from the jugulars, and we shall find, that from the pressure applied there must be an impeded flow of blood: and, that, previous to opening the vein in the process of applying the ligature, we actually, if bleeding to obviate the effects of congestion, increase the danger of the patient by increasing the congestion; you impede by your ligature the blood returning to the heart; you impede also the flow of blood into the head, and hence the congested status in which the vessels exist must be rendered more congested still.

Besides, gentlemen, we are to bear in mind, that there is a modification of the nervous system which occasioned the congestion, and, until this modification is removed, it is quite evident, that no blood-letting can be efficacious in preventing a fresh congestion. Those who bleed to relieve the congestion, attack a result; those who bleed with the view of removing the modification of the nervous system, attack the organic cause.

The remaining view advocated is that of depletion. The advantage derived from depletion is considered to be exhibited in cases of bleeding in the jugulars in inflammation of the brain, and by M. Polinière in every case, as he thinks all the benefits of blood-letting are derived from the mere depletion. But is it not quite evident, that, as soon as the bundle of capillaries from which the vein receives its supply is emptied, the current that is thus established must necessarily occasion the same capillaries to be again engaged, more particu-

larly unless the modification of the nervous system is removed? You see, gentlemen, the absurdity of this view. The mechanists prescribe, in inflammation of the brain, bleeding in the foot as revulsive, and bleeding in the jugular as depletive. Now, examine this for a moment: if phlebotomy, practised in the foot, is revulsive of the head, then phlebotomy in the neck is revulsive of the inferior extremities, and ought to draw towards the head the blood of which the extremities have been deprived. How, then, according to the mechanical notions, can bleeding in the neck be useful in cephalic diseases? Again; if phlebotomy, practised in the saphena, is not revulsive of the head, why recommend it so much in preference to other bleedings?

M. Polinière, who rejects entirely derivation and revulsion, refers all the benefits of bleeding, as was before noticed, to depletion. He thinks that thus having delivered himself from every bondage, he is under no yoke but that of truth. He errs as much in referring the benefits to depletion as the others erred in referring the benefits to derivation and revulsion. Mere depletion, every one who believes that disease is in the vital solids, in most cases can never be looked upon as capable of curing any disease.

In rejecting the ideas of derivation, repulsion, and depletion, as satisfactory explanations of the phenomena connected with the beneficial operation of blood-letting, I am far from denying that the topical application of bleeding is not peculiarly beneficial in relieving inflammations of the parts adjacent: facts prove this. Stahl says, "*Mirum est quantum venæ sectio topica præ se locum affectum instituta possit.*" But then I explain these facts on a different principle from mere derivation, as I shall hereafter state. The other explanation, an approximation to the correct one, because recognising the agency of the nervous system, is that bleeding gives a shock to the system, and thereby breaks that catenation of symptoms constituting the course of the disease; in the same manner that in ague we frighten a person, and stop the progress of the intermittent. However, this phrase, and the explanation, are not sufficiently satisfactory.

Having thus pointed out the various explanations which have been given of the agency of blood-letting, I proceed to notice the principle upon which its beneficial agency is really to be considered as dependant. It must be well known to every student, that an organ executes its functions by the aid of nerves with which it is supplied; and that this organ is called into functional activity by the presentation of a stimulus; when this stimulus is absent, the organ is in a state of repose. To illustrate:—The stomach receives food; this acts as a stimulus upon the nerves of that organ; they are immediately called into action, and give to the stomach the power of digesting the food thus introduced; the food passes into the duodenum, and no new

stimulus being applied, the stomach falls into a state of repose. In inflammation, we consider that the stimulus has acted in a way so as to induce an irritated state of the nerves; and our object is to give to these nerves, thus irritated, an opportunity of repose; and this we effect by blood-letting, which, diminishing the action of the organ inflamed, by acting upon the nervous system, enables the irritated nerves to acquire the desired state of quiescence. And in reference to the influence of derivation and revulsion, as aiding in bringing about this effect, we consider that, in some cases, we gain a benefit by drawing from the vessels connected with the diseased part at first, instead of at last. Thus, in bleeding in the jugular for tracheal inflammation. In regard to revulsion, we think that if this does aid, it is principally in reference to capillary bleeding, had recourse to when, and produced where, a spontaneous hæmorrhage has been stopped.

To repeat, gentlemen, it is maintained, that for the cure of an inflamed organ, it should be allowed to pass into a state of repose.

What do we in gastritis, or inflammation of the stomach? Do we order food to be taken? No, we forbid it, because we wish the stomach to have rest. What do we in acute rheumatism? Do we not command perfect rest?

Bearing the views in mind just stated, let us, gentlemen, consider the action of blood-letting in cases of inflammation of the heart and the lungs. We bleed freely in both these cases; some will say to produce a derivation—others, to produce a depletion—others, a shock to the nervous system; but what else is to be said? We answer by asking, What are the duties of the heart and lungs? These parts are endowed with peculiar vessels, and receive, in a given time, all the blood destined to traverse the whole machine, and they exercise thereon a continual action. The blood is the stimulus to these organs. We bleed. What happens? We diminish the quantity of fluid exerting these organs to action; and, in diminishing this, we, of necessity, render the action of these organs less; that modification of the nerves, connected with the inflammation, is removed by this partial state of repose.

But it may be said, Why should the blood-letting in the arm cure the carditis, or the pneumonia, unless it were from the derivation occasioned by the bleeding? In reply to this, we discard the view published by Bichat, as explanatory, namely, that "parenchymatous organs are best treated by phlebotomy, and membranous organs by capillary bleedings;" and the lungs and the heart being, according to him, parenchymatous organs—hence the benefit. But, in addition to the previous explanation, referring to the organ being brought into a state of repose, I beg to state, that one principle which I have advocated for several years, and of which I am more and more convinced, namely, that a remedial agent is directed in its agency to the diseased parts by the existence of disease at that part, will serve

to explain the benefit of bleeding in the arm affecting the pulmonary or the cardiac organs; or rather, I should say, will explain the locality of effect produced by bleeding in the arm in such as well as in other diseases.

I have thus endeavoured, gentlemen, to explain to you the ground on which, in my opinion, the beneficial operation of blood-letting is dependent; I have endeavoured to establish the importance of the nervous system; I have given a brief explanation of the different views promulgated upon the operation of blood-letting; and having thus done, I now, gentlemen, beg to draw your attention to the third part of our investigation, namely, the *different modes of blood-letting, their individual and relative advantages in different diseases.*

Venesection is that which will first claim our attention. Veins are, very conveniently for those who wage the medical warfare with the lancet, divided into the superficial and deep-seated; and the former have not been at all misnamed. Of these we make use in the process of phlebotomy, and we shall notice some of the results of the use.

In inflammations of the lungs and of the heart, of the pleura and of the pericardium, venesection is particularly useful; it may be advantageous, as illustrative of our principle, and as affording an opportunity of exhibiting the nature of this therapeutic agent, to point out the mode and the degree of its utility in these various affections.

It is generally allowed, that in carditis, or inflammation of the heart, bleeding may and must be carried farther than in pneumonia. The medical philosopher will inquire why? The reasons seem to be the following: The lung throughout its whole extent performs but one function, and that one function is such, that, under certain circumstances, a very small portion of the lung will perform it in a way and to an extent consistent with the vital functions being preserved. This one function is the purification of the blood. The function being attached in its manifestation to so large a surface, the patient labouring under inflammation of the lung is not in imminent danger, unless when the whole pulmonary organ is affected—then asphyxia must occur. In most cases, happily, the inflammation is more or less limited, as is seen in local hepatization of the lungs, the effect of inflammation. The inflamed part seeks and may obtain repose, and by a little aid, by venesection, which relieves diseased condition, by the alteration of the condition of the nerves connected with the congestion, the patient speedily recovers. But why does the inflammation of the heart require more active bleeding? The heart differs from the lungs in this respect, of one part obtaining relief by the kindly aid of another, for all the mass of blood must pass through each one of the heart's cavities, and, in passing, impart its stimulating influence, and receive an impulse from the heart's contraction, (an effect my friend, Mr. Dobson, whose character as a phy-

biologist stands high, thinks depends upon another cause,) and this stimulation, when the viscus is diseased, must increase the rapidity and the power of contraction, and thereby increase the disease, however circumscribed the inflammation may have been at first. There is no part on which the human burden can, for the mean time, be thrown. The contractions, dependent upon the stimulation, must continue. Every systole increases the danger. What then must the practitioner do? It is his duty to diminish the action by removing a quantity of blood, sufficiently considerable to obtain for the organ a comparative repose, to gain the removal of that state of the nervous system, the organic cause of the evil. (To prevent a return of the complaint a discharge from a blistered surface is always useful.)

You will thus perceive, I presume, gentlemen, that a more considerable withdrawal of blood, and more rapid, is necessary in inflammation of the heart than in inflammation of the lungs, because the heart, from its functions, being subjected to no exemption from duty in any one of its parts, requires to be more speedily relieved, and its state of organic repose to be more immediately brought on than is necessary in regard to the lungs.

The pericardium and the pleura, two membranes, *per se*, not very important, become of considerable importance, when viewed in relation to the organs with which they are connected. The inflamed pericardium necessarily increases the actions of the heart, and has again its diseased state augmented by the increased action of the heart by itself induced. Our duty, then, in such a case, is to bleed freely; and thereby we, diminishing the force and the frequency of the heart's action, give an opportunity to the membrane to recover itself, to be released from the modification of the nervous system, the organic cause, during this temporary suspension of the violence of the heart's action.

In inflammation of the pleura phlebotomy is highly useful, by diminishing the expansion of the lung, and, in consequence, the extension of the pleura, which produces the severe pain during an inspiration, so characteristic of this disease. However, I may here remark, that I have greater confidence in a blister, when not much fever is associated with the pleurisy; where very much fever, I put my trust in the lancet.

A French practitioner, named Priller, records several cases of pneumonia and of pleurisy, which led him to the conclusion, that bleeding in the arm of the side affected is more beneficial than bleeding in the arm of the opposite side. This conclusion we must look upon as arrived at by him, as a disciple of the doctrine of derivation. Upon this point I shall speedily offer two or three remarks.

In bronchitis, when the respiration is very laborious, phlebotomy is often very useful, and it may be performed in very young children. It prevents those chronic cases of this disease so often terminating in pulmonary consump-

tion. The principle upon which blood-letting is useful in this disease will be apparent to you upon a little reflection, in regard to the physiological condition of the bronchial tubes and trachea. The air passes along these tubes, which, in a healthy state, are sheathed with mucus. This air irritates the inflamed surface; and this irritation is constant, because the air is and must be continually applied. The quantity of the air introduced is in proportion to the quantity of blood to be changed in the lungs. By bleeding you diminish the quantity of the two fluids, and you thereby obtain for the organ inflamed a state of organic repose, in which the modification of the nervous system, constituting the organic cause of the state of inflammation, can be removed or relieved by the operation of the vital powers of the system. And here, I feel it my duty to state, than in the severest forms of tracheal as well as bronchial inflammation, I have found much benefit from bleeding in the jugular vein. My pupil and friend, Mr. Phillips of Bayswater, has experienced similar beneficial results. Now this may seem to favour the idea of derivation. Well, gentlemen, as I said before, I have no objection to derivation, as expressing merely this, that if we bleed near to the part affected, so as to relieve the vessels of the part, we thereby produce a state of organic repose more speedily, so as to allow the modification of the nervous system to be removed. To this derivation I have not the slightest objection, but I object to the making the circumstance of mere derivation the sole cause, the final cause of the relief of the inflammation.

In inflammation of the brain, phlebotomy is useful. To understand the grounds on which its benefit rests, it is necessary that we should remember, first, that the brain receives a larger quantity of blood than any other individual organ in the body, four arteries going along its base; secondly, that the impulsive pulsations imparted by these arteries to the brain are, according to Bichat, the means of its stimulation. Now, it is evident, that the stimulation must be less if the impulsive pulsations are fewer and less powerful; and the most effectual means by which we can effect this diminution, is the prompt depletion of the sanguiferous system. We thus obtain a state of organic repose; and thus, as has been repeated so often, give an opportunity for the operation of the vital principle to get rid of the modification of the nervous system, the organic cause of the inflammation.

One very interesting fact, partially connected with this subject, is related by M. Freteau, in his Treatise on Blood-lettings, as illustrative of the doctrine of derivation, I shall relate. "A female, aged 18, suffered from considerable cerebral injuries, so as entirely to lose her sight. Two bleedings in the foot (with the view of revulsion, I suppose,) were practised without success. After this she was bled in the *right* arm, and the sight was immediately established in the *right* eye; she was bled

afterwards in the *left* arm, and the same result happened to the *left* as to the right eye. The blindness, however, again returned, and was removed again by the same means. This return and this removal by the same means occurred, in the whole, a dozen times." In *meningitis*, or inflammation of the membranes of the brain, the same remarks, as made in reference to pleuritis, are applicable here. The membranes are continually subject to the impulses to which the brain is exposed, and the acute sense of the cerebral pulsations in meningitic disease, every practitioner must know. The increased sensibility of the membranes occasions them to be more powerfully stimulated by these pulsations. The brain sympathises; the one re-acts upon the other; and thus the evil is increased. We bleed; we diminish the pulsative impulses; we gain a state of organic repose, and the patient is relieved.

Another mode of blood-letting is *arteriotomy*, or the section of an artery. This is principally had recourse to in inflammation of the brain. The ideas on which its advocates rest for their conclusion on its beneficial agency are, that a derivation from the internal carotid is occasioned by its drawing to the facial branches a larger supply, to supply that which is removed; and that the arterial blood thus removed being more oxygenated is more stimulating than the venous, we take away that which would have excited the cerebral system most.

On this subject I may offer a few more remarks on another occasion; but as the hour has expired, I have merely to express my acknowledgments for your kind attention, and to state, that I hope that those gentlemen who may honour me with the attendance will find that by a mutual adherence to duty, they and I shall experience much benefit from having met. I have merely to add, that punctuality in attendance is highly important; and, without exalting too highly the value of lectures, I beg to state that *one lecture lost* where a lecturer does his duty, is the loss of a link in a chain, which may, and often does, inconvenience the loser very much.

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#### EXTINCTION OF CHOLERA.

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THE following communication, containing directions for conducting a process of fumigation, with a view to the extinction of the cholera, has been sent us by a medical correspondent in Edinburgh:—

**FORMULA I.**—*For extracting the Chlorine Gas.*—Four parts common sea salt; one part deutoxyde of manganese, called in the shops manganese: mix these two together with a stick or staff, add water to moisten this mixture thoroughly, then pour in

strong sulphuric acid, commonly called oil of vitriol, and stir the mass as above directed. The steam will instantly fly up, and in like manner, from time to time, let the acid be added till the fuming shall have ceased, and let water also be added, if the mixture have become too consistent.

A common herring-barrel, sawed through the middle, will make two excellent tubs: put the materials into them, and proceed as above directed; place one in each narrow lane or close, and let the inhabitants open their windows. In houses where the disease is, a common porter tumbler will do very well; and if the smell be distinctly perceived, that is enough to be kept up.

For each street, let one or more tubs containing the salt and manganese mixed, be put upon a cart, along with a jar full of the oil of vitriol, and a man with a rod in his hand, and his back to the wind, and while he is pouring in the acid, and the steams are rising, let the cart move slowly along, just as carts do when streets are watered, *and at a cheaper rate than streets are watered, will cities be saved.*

**FORMULA II.**—*For extracting Muritic Acid Gas.*—Put common sea salt into any wooden or earthenware vessel, moisten the salt with water, and pour in the sulphuric acid, or oil of vitriol, and stir as long as the fumes are disengaged.

The above should be done in half hogsheds, or very large vessels, to be placed east, west, south, and north of cities, towns, and villages. If, indeed, one such vessel were kept with the fumes rising at each end of any village, the cholera would never enter it. This would have such an effect as never was attained by armed bands, sanitary cordons, and quarantine laws, with all their costly appendage of hirelings.

This process should be persevered in for eight, ten, or fourteen days successively according to the obstinacy or severity of the epidemic.



## Reviews.

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*Clinical Reports of the Surgical Practice of the Glasgow Royal Infirmary.* By JOHN MACFARLANE, M.D. Member of the Faculty of Physicians and Surgeons of Glasgow, Senior Surgeon to the Royal Infirmary, Lecturer on Clinical Surgery, &c. &c. &c. Robertson, Glasgow; Black, Edinburgh; and Highley, London, 1832. pp. 314.

WE are now fully inclined to hope and believe that a new era in surgical science is on the point of taking place; instead of fanciful theories and fine-drawn distinctions without a difference, we are arriving at details of sober practical experience. The example, which was set by Mr. Hey, is now being followed by men of ample experience and great acquirement; Dr. Bardsley's Hospital Reports were succeeded by Mr. Fletcher's *Medico-Chirurgical Illustrations*; these again by Mr. Clement's *Observations on Surgery and Pathology*, and we have Dr. Macfarlane next in the field. We are happy to see this; the experience which has been acquired by constant application and extensive practice can never be better employed, than when its fruits are widely disseminated for the benefit of the rising generation, and indeed we are far from thinking, that the younger members of the profession are the only persons who are likely to benefit from the perusal of such works; when cases, successful and unsuccessful, are clearly, fairly, and honestly detailed, there cannot be a doubt but that every person in the profession, from Sir Astley Cooper down to the merest tyro, would gain some knowledge from their perusal.

We objected, at the time of reviewing Mr. Fletcher's work, to the high price at which it was published; this

was not exactly the case with Mr. Clement's production, but its pages were too much spaced and small, and ought to have been filled up with useful matter. In the work before us we perceive none of these faults; it is got up neatly, closely printed, and is of a portable size. So much for the typography, and arrangement, and its matter. In truth, this book is the best record of surgical practice which we have seen for a long period; the author is evidently a man who has had great practice, and he has furnished us with a report of the most interesting cases. It is impossible for us to enter upon the subjects which Dr. Macfarlane treats of, on account of the great variety: we must content ourselves with stating the heads of the different departments of the work, promising, however, (and with the full intention of redeeming our promise), that we will extract, at different times, some of the more valuable cases. The first is on Aneurism, of which nine cases are narrated, including several of its forms; next, twenty-seven cases of Tumours, including the varieties of Sarcoma, Cancer, &c.; then follow nine cases of Hernia, which are succeeded by fifteen cases of Lithotomy, two of Wounds of the Bladder, three of Contusion of the Urethra, two of Urinary Abscess, three of Abscess of the Prostate, three of Prolapsus Recti, three of Morbid Enlargement of the Clitoris and Nymphæ, one of Imperforate Vagina, sixteen of Fractures, five of Dislocations, six of Injuries of the Head, three of Injuries of the Spine, five of Tetanus, eleven of Burns, seven of Erysipelas, ten of Diseases of the Bones and Joints, three of Lupus, three of Lumbar Abscess, and ten of Diseases of the Testis, the whole containing altogether 156 important surgical cases, well detailed, and to many of which remarks are attached. The book is worth double its price to any medical man.

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*The Microscopic Cabinet of Select Animated Objects, with a Description of the Jewel and Doublet Microscope, Test Objects, &c.; to which are subjoined Memoirs on the Verification of Microscopic Phenomena, and an exact Method of appreciating the quality of Microscopes and Engiscopes.* By C. A. GORING, M.D. Illustrated, from Original Drawings, by Thirteen Coloured Plates, and numerous Engravings on Wood. By ANDREW PRITCHARD. 8vo. pp. 240, plates. London, 1832, Whittaker & Co.

THIS interesting work is intended to illustrate a branch of natural history hitherto almost overlooked, the description and representation of Aquatic Larvæ of Insects, Crustaceæ, and Animalcules. The descriptions may be considered popular outlines of the general character of these insects. The next section of the work is directed to an account of the construction, management, and applicability of the Microscope, with a memoir on an exact method of ascertaining the quality of Microscopes and Engiscopes by Dr. Goring. There is another memoir by the same scientific writer, "On the Verification of Microscopic Phenomena," which contains the sum and substance of microscopic science. This is arranged in aphorisms. The authors observe, that their united labours have been great and their expenses considerable, and that, if the public favour this production, it is their intention to publish another work, comprehending all the discoveries in microscopic science. We trust the public will patronize this work and encourage the authors, as there is no perfect practical treatise on *Optical* instruments in our language. We can recommend this work, both for the accuracy of its design and the elegance of its execution. The plates are well delineated, beautifully coloured, and afforded at a reasonable rate. It is impossible to speak in too high terms of its execution.

*The Dublin Journal of Medical and Chemical Science, exhibiting a comprehensive View of the latest Discoveries in Medicine, Surgery, Chemistry, and the collateral Sciences.* Dublin, Sept. Hodges and Smith.

(Continued from p. 285.)

WE have much pleasure in continuing our extracts from our valued contemporary, and more especially on the present occasion, as the sentiments of one of the first surgeons in Dublin so fully accord with our own. It is highly gratifying to us to observe, that the surgeon-general of Ireland, who has long and justly arrived at the highest eminence, approves of the identical plan upon which we conduct this periodical. The approval of one such authority as this is more than sufficient to console us for the malicious and paltry snarlings of our unprincipled assailants. But we pity their impotent attacks, we forgive them, as it is natural for the vanquished to feel resentment.

*On certain Injuries of the Head, with Remarks on the Utility of reporting Cases in Medical and Surgical Practice.* By PHILIP CRAMPTON, M.D., F.R.S.

"It has often been objected to medical men who are extensively engaged in practice, that they seldom communicate the result of their experience in such a way as to make it as available as it might be to the junior part of the profession. That they occasionally put forth large and valuable works on particular departments of the healing art, and communicate through the periodical press the particulars of some remarkable case or brilliant operation, is not to be denied; but this is not precisely the kind of information, or I should rather say, it is not the *only* information which the younger part of the profession are most anxious to obtain from them. They would, above all things, desire to learn in the shortest, simplest, and least expensive way, how a professional man of expe-

rience would manage certain cases which are of almost daily occurrence, but with respect to which the greatest diversity of opinion and practice prevails among the highest authorities.

“ They read, for example, that in France amputation is performed while the gangrene (from external injury) is rapidly extending up the limb ; in Great Britain, on the other hand, this practice is reprobated by the *generality* of teachers and of systematic writers \*. Again, amputation of the thigh is performed in one manner in London, in another in Edinburgh, and in a third in Dublin ; the same may be said of lithotomy. In England I believe it is the general practice to open large chronic abscesses by a small valvular puncture, and to draw off the fluid in portions from time to time. In Paris and in Berlin, on the contrary, the abscess is opened by an extensive incision, so as to give issue to the whole of the contained matter at once. Again, in the treatment of compound fracture of the skull, the trephine is much more generally employed in London than in Dublin. But without multiplying examples, I am warranted in stating broadly, that the modes of practice in London, Dublin, Edinburgh, Paris, and Berlin, are on some of the most important points of surgery, not only different from, but often absolutely opposite to each other. How useful then must it be to the practitioner to be enabled to examine and compare the facts and the reasonings on which this diversity of opinion and practice is founded, and how noble a task for an enlightened criticism, uninfluenced by prejudices, either national or personal, to enable the inquirer after truth to view those various modes of practice by the clear light of science and experience. It may at the first view seem strange, that at a time when a greater inter-

course exists between the different capitals of Europe than a few years since existed between different parts of the same kingdom, and when, by means of a weekly periodical press, the opinions and practice of one country are scarcely announced, when they are known in every other, that there should be not merely a national but almost a provincial surgery. It would be foreign to my present purpose to investigate the causes of this diversity, although the inquiry might not be devoid of interest or even of utility, but I may observe in passing, that the causes lie deep among the most immutable principles of human nature. Uniformity of practice in an art which mainly rests on human opinion is plainly impossible ; and, if possible, would not be desirable, unless the art were brought to the utmost degree of perfection of which it is susceptible ; but, as this can never happen, so long as the human mind is progressive in improvement, all that can be done for the advancement of knowledge, is to engage the greatest possible number of intelligent, active, and independent spirits in the pursuit, and to bring the result of their separate labours into juxta-position, in order that they may be examined and compared, and their relative merits experimentally ascertained. In this way there will be a gradual, and therefore safe, approximation to uniformity of practice, and a pro tanto advance towards the perfection of the art. That the publication of clinical lectures, and of (what is perhaps of still more value) the incidental clinical remarks of the hospital surgeon while “ going his rounds,” has done much towards the advancement of surgical knowledge, is not to be denied ; *but until the practice becomes more general than it is at present*, I believe that hospital surgeons cannot perform a better or more acceptable service to the profession and to the public, than by becoming their own “ reporters,” and communicating from time to time, through the medium of the periodical press, the results of their experience, without waiting until they

\* It would appear, however, that opinion on this point has undergone a considerable alteration within the last few years in England. — See Sir A. Cooper's *Lectures*, Guthrie on *Gun-shot Wounds*, and Hennen's *Military Surgery*.

have time to give them the form of a regular treatise, or, what is still more deplorable, to expand them into a book; and surely if the practice of adulterating valuable medicines by the addition of some nauseous, or, at best, useless ingredient, be a punishable offence, those authors should not escape with impunity, who overlay some useful practical observation with the rubbish of a library. It may be objected to the plan of self-reporting, that it affords too wide a field for the exercise of vanity or of self interest, and that even if the public had a sufficient guarantee for the integrity of the reporter, the influence of previous opinion, and a variety of other motives, might induce him to view *his own case* in a very different light from that in which it might appear to a mere looker-on; and this, to a certain extent, is true, but it is equally true, that a perfect corrective is at hand, and should always be applied. Let no case be reported on the authority of any individual, however trustworthy. Let every possible security be given against error as well as fraud; if the case occur in hospital practice, misrepresentation will scarcely be ventured upon, and error will easily be detected and exposed. If in private practice, let some medical practitioner, who is acquainted with all the circumstances of the case, be referred to by name. As a further security, the name and residence of the patients (whenever it can be done with propriety) should be inserted in the case; for want of this attention, surgical cases in particular (however faithfully recorded), are deprived of the greater part of their value; for it is not enough that an operation should be well and successfully performed: the great point to be ascertained is, how far it has been *permanently useful*, and this may be known by a re-examination of the patient after the lapse of a considerable time. We have read of the cutting out "*with success*," of large portions of the ribs, when affected by cancer, and the cutting off one half of the face, when

affected by the same disease;—of removing a tumour of such dimensions, that it was difficult to say whether the tumour was cut away from the man, or the man from the tumour. But how far the subjects of these proceedings were compensated for the immediate pain and danger attendant on the operation, by a prolongation of life, or an abatement of suffering, can be learned only by following them from the hospital to their homes, if, indeed, they ever reach them after such "successful operations."

"A periodical medical journal, then, if conducted on the plan to which I have alluded, would faithfully reflect the state of medical opinion and practice in the country in which it was published, it would be, in a manner, the auto-biography of the healing art, the only kind of biography which, perhaps, has a claim to implicit credit; for it has been well remarked by a great writer, himself the best of biographers, that whatever desire the auto-biographer may entertain of appearing in a different character from his own, the man, as he is, will appear through every disguise he may assume. And so it is with medicine: the clinical cases, lectures, and remarks, which are published in the weekly medical journals of London and Paris, have given us not only a professional, but almost a personal acquaintance with the distinguished men whose modes of practice, and even whose modes of thinking and of speaking, they so graphically describe.

"The peculiarities which distinguish British from French surgery are now as well known to the students in the Dublin hospitals, as to those who group round Mr. Brodie, Mr. Lawrence, M. Dupuytren, or M. Roux, in St. George's, St. Bartholomew's, the Hôtel Dieu, or the Charité. They can clearly perceive, that while the distinguishing character of the one is simplicity of practice, that of the other is complexity; and, *perhaps*, they may be disposed to think that, on some occasions, a *medium* might, with advantage, be found between "the

dose of house-physic and keeping quiet," and the saignée, and sangsues, the boissons adoucissantes and delayentes, the potion calmante, the lavements and the demi-lavements, every third or fourth hour, and a variety of other remedies, which can leave the subject of so much skill and attention but little time for needful repose.

"I intimated at the beginning of this paper, that the modes of practice in certain severe injuries of the head, were somewhat different in London and in Dublin. The chief difference appears to consist in this, that in fracture of the skull with depression of the bone, the trephine is less frequently employed in Dublin than in London. In Dublin, we conform in general with the rule of practice as originally laid down by Mr. Dease, (who preceded Desault by many years\*), namely, "in fractures of the skull with depressed bone, *whether complicated with wound of the scalp or otherwise*, no attempt should be made to raise the depressed bone, *unless very decided symptoms be present of compressed or irritated brain.*" In London, on the contrary, the rule of practice seems to be, "that if the depressed bone be exposed in consequence of a wound of the scalp, the trephine is to be applied to elevate the depressed bone, *whether symptoms of injury of the brain exist or not* †;" either practice may be supported by the most specious arguments, and each has the sanction of the highest authority. It is plain, however, that in this case the question cannot be decided either by argument or authority, but solely by comparative experiments and observations

conducted on a very extensive scale. I doubt, however, whether any individual, no matter how extensive his experience may have been, has instituted a sufficient number of experiments, or observed a sufficient number of facts, to establish definitively either of the opposite doctrines. In surgery, as in every thing else, extreme opinions, or opinions which are not qualified by exceptions and limitations, are seldom safe. I own, therefore, that the opinion of Mr. Dease\*, qualified as it is by the exception in respect to those cases in which there are symptoms of compressed or irritated brain, has ever exercised a strong influence over my mind, and I may add, over the minds of all those who, like myself, received their earliest surgical impressions from the lessons and practice of Mr. Dease. I am quite aware that early impressions in favour of any particular mode of practice, are extremely apt to influence our opinions in after life, and that "to seek the testimonies of truth," (as Cicero beautifully expresses it), "*ex animis consuetudine imbutis*," is neither philosophical nor safe; but, on the other hand, those who received their first impressions from the lessons and practice of Mr. Pott, are liable to a similar imputation of undue influence, operating in an opposite direction. We can only, therefore, approach to a solution of the problem, by placing in juxtaposition, the *practice* of those who, in different countries, cultivate the same field of inquiry on a great scale, although by different means. The advantage of this method is well illustrated by what has happened within these very few years, with respect to the treatment of syphilis.

"It was long received as an unquestionable truth, that no *true* syphilitic

\* Mr. Abernethy is not correct in placing Desault before Dease. Mr. Dease's work on wounds of the head was published in 1778: Desault's thesis on his becoming a member of the College of Surgeons, is dated 1776, and he was not appointed a surgeon to the Hotel Dieu, until the year 1788.—*Eloge de Desault, par Bichat.*

† See Sir Astley Cooper's Surgical Lectures in *The Lancet*. Mr. Brodie's Paper on Injuries of the Head.—*Med. Chirurg. Transactions*, vol. xiv. p. 412.

\* "The more eligible and rational method of treatment in all those cases (fracture with depressed bone), I believe will be, that of not being precipitate in applying the trepan, as long as the patient remains free from symptoms that would indicate the necessity of it, &c."

sore (as it was called) could be cured without mercury; that left to itself, it was (to use the language of Mr. Hunter and Mr. Adams) "invariably progressive." Every sore, whatever might be its origin or character, that did not obey this law, and either healed *without* mercury, and would not heal *with it*, was pseudo-syphilis, or the result of some newly-developed morbid poison. When our army-surgeons, however, observed, that in Spain and Portugal all sorts of sores of syphilitic origin were curable without mercury, we began to think that it might be as well to try the experiment in England: the result is well known. Now I think it is quite plain that nothing short of this great comparative experiment, tried not on a few individuals, but on nations, could have effected so great and so important a change in the opinions of men in so short a time. Before I conclude this part of the subject, I think it but fair to observe, that the practice of abstaining from the use of the trephine, *unless there were decided symptoms of compressed or irritated brain*, was adopted by Dease in Dublin, O'Halloran in Limerick, Desault in Paris, Callisen in Stockholm, Abernethy in London, at a time when Mr. Pott's authority, backed by the authority of all antiquity, exercised the utmost influence over the minds of surgeons in every country in Europe\*. There is strong ground, therefore, for concluding, that those experienced surgeons did not depart from the established practice, until a constant experience had convinced them of its dangers; and it is strongly corroborative of the justness of their views, that the negative practice (as it may be called) has been adopted by those surgeons, who have, beyond

\* I have often heard Mr. Dease say, that at the commencement of his professional life (between 50 and 60 years since), it was the duty of the senior apprentices to go to the hospital at an early hour on every Monday morning, and have all the persons who had suffered fractures of the skull during the festivities of the preceding Sunday evening, scalped, and ready for trephine at the visiting hour.

all comparison, enjoyed the greatest opportunities for observation\*."

*The Anatomy and Physiology of the Organ of Hearing, with Researches on Congenital Deafness, the Diseases of the Ear, some Imperfections in the Organ of Speech, and the proper Treatment of these several Operations.* BY DAVID TOD, M.R.C.S. 8vo. p. 147. Plates. Longman & Co.

THE author of this work has devoted many years to the study of the anatomy and functions of the organ of hearing; and he has discovered many tissues which were not described in the best ancient or modern works on the subject. The existence of the newly discovered parts he is prepared to demonstrate by preparations in his possession. It is a curious coincidence, that Mr. Tod, in this country, and M. Breschet in France, should simultaneously publish new views on the anatomy and physiology of the ear. In our Journal, No. 33, the opinions of the latter will be found. The work before us is certainly the best in our language, and will be perused with advantage and interest by every man engaged generally in the practice of medicine. The author should have enumerated his peculiar views, as he has so intermingled them with the ordinary description, that it would require more time to separate them than we can spare at present. We advise him to attend to this hint, and to compile a comprehensive treatise on diseases of the Ear, which is a great desideratum in British medicine.

#### CROTON OIL IN CHOLERA.

DR. CHISHOLM, of Beaulieu, has succeeded in curing a malignant case of epidemic cholera with croton oil, on the recommendation of Mr. Tegart, deputy-inspector of hospitals. This valuable medicine is very much adulterated of late, and can be procured genuine of Mr. Short, the patentee and original importer of this powerful remedy.

\* Larrey, Campagne de Russie, p. 140. Hennen, p. 308.

THE  
**London Medical & Surgical Journal.**

*Saturday, October 6, 1832.*

STATE OF THE MEDICAL SCHOOLS  
 IN LONDON.

IN our last we gave a full account of the medical schools of this metropolis, and we considered it just towards all the teachers, whose names were published, to refrain from offering comments upon their respective merits or demerits. We shall now proceed to make a few remarks upon the comparative advantages of the public and private schools; and in doing so, we totally disclaim partiality and prejudice, our object being to give a fair and true description of all these institutions, so as to enable students to form correct notions upon a subject which is of vital interest to their future prospects and success. We shall begin with the public schools.

In all the large medical schools in London, as well as in Dublin and Edinburgh, the professors or lecturers are almost invariably appointed through private interest, and not on the grounds of superior erudition and scientific attainments. In most of our hospital schools there are teachers, who have no claim whatever to superior acquirements, whose talents are unknown beyond the walls of the theatres to which they belong, and who have given no proofs of competency as instructors. Nevertheless, it is most erroneously supposed, that medical science can only be inculcated in these schools, as if the principles and practice

of our art were not as well understood and as easily explained by private teachers—as if science was not open to all. It is also a fact, that the most popular of our public teachers have acquired their reputation in private schools, where indefatigable industry, unwearied attention, and ardent zeal can alone insure any degree of success. But so soon as these teachers are transplanted into public schools, we see them become indolent, careless, and indifferent to the interests and progress of students; they cannot spare a few minutes after lecture to explain doubtful points; the very moment the hour of lecture terminates, they bow and retire, and leave their pupils to solve doubts and difficulties as they may. Moreover, these lecturers are quite indifferent whether pupils attend or not; and the fact is notorious, that students, after having entered and paid extravagant fees, frequently leave town and return at the end of the session, to claim and obtain their certificates “for diligent attendance,” and these documents are given by many of the Court of Examiners and Council of the Royal College of Surgeons. In the private schools, the conduct of lecturers is totally different. Here the teacher must exert his abilities, must be attentive to his pupils, will remain after his hour of instruction has terminated, and explain any doubtful point. He must use every effort to serve his pupils, both for his own and their interests, as his remuneration is derived from those who in general have slender means, and must necessarily obtain the fullest information, to en-

able them to commence practice as soon as possible. In a word, there is much more exertion made both on the part of the teacher and the pupil in the private than in the public schools.

It is needless to observe, that the vulgar error of supposing medicine is inculcated better in the large schools, is unfounded and preposterous. Can any rational student be so stupid as to suppose, that a hospital, or an university, or a college professor, is endowed with more wisdom or ability by those trappings and gewgaws called caps and gowns, than when he, as a private teacher, despised such antiquated habiliments? If there be a student so silly, we pity him. If further proof were required in support of our position, we could adduce it in abundance, but we content ourselves with a single illustration. We say, turn to the published lectures of the teachers in the large schools, and compare them with similar instructions in standard works, and you will find the most deplorable deficiencies, exclusive of badness of taste and style, such as would disgrace a well-informed school-boy, and that the information inculcated is at least fifty years behind the present state of science. But in reply it has been urged, must not students be initiated—must not first principles be taught? We answer, most assuredly; but when the students are on the eve of leaving their instructors they ought to be initiated somewhat further into physic than *Thomas's Practice* or *Cooper's Dictionary*. When we peruse the published lectures of some of

our most popular teachers, we blush at the puerilities and shallowness which characterize them, and for the want of reference to the exact state of science in other countries. We look in vain for the opinions of celebrated foreigners, and are almost disposed to imagine that we reside in one of the Lilliputian islands, or in the celestial empire, beyond the precincts of which all mankind are supposed to be fools. If we turn to hospital practice, what a felicitous caricature of the correct mode of acquiring clinical, or bed-side, information! We see the physicians and surgeons running from bed to bed, whispering some clinical clerk or dresser, rapidly passing through the wards, giving each patient less than five seconds' attention, and leaving the bewildered students to learn the nature and treatment of each disease, either by intuition or inspiration. If the student be desirous of acquiring instruction, he is naturally dejected and disappointed by this system, and reflects upon the large fee that has been abstracted from his pocket for the privilege of "walking the hospital"—he should have said "galloping," from which, in general, he receives no information, except from his fellow pupils. But our hospital surgeons, who exact these fees, are "the powers that be" at the college, and there is no redress.

If, on the other hand, the student enter to a dispensary, he will find the physicians and surgeons much more communicative and attentive; there he will in general receive in-



formation, though the fee is not more than a fifth of what is paid for hospital attendance. Here we must state, that we alone, unaided by our contemporaries, have so exposed and shamed the Apothecaries' Company, as to compel them to rescind their by-law, which required all dispensaries to be attached to medical schools—a sinister mandate, that abolished nine-tenths of these establishments; thereby obliging the students to enter to hospitals, and depriving the physicians of the former institutions of the only insignificant emolument which they received for their immense labours. This iniquitous law was passed to favour the hospital physicians, who are generally fellows of the college—to injure and insult the licentiates—and to aid the laudable system of plundering the student. However, we have fearlessly exposed this piece of chicanery, and brought their worship at Rhubarb Row to their senses. We contend, that the student who enters to a private school and attends a dispensary, will obtain much more information than at large schools, and for about one half the expense. But there is a class of students who prefer the University, the King's College, and the large hospital schools; who are influenced by a name, and by the many judicious stratagems laid by the conductors of these establishments, to dazzle unsuspecting youth; while experience has proved that students of the private schools are equally successful at the Royal College of Surgeons and Apothecaries Hall.

It would be invidious and unfair to institute a comparison between the merits of lecturers in the large institutions; there are able teachers in each; though every school in this metropolis is defective. There is not a single medical school, nor a single hospital, in which the only basis of sound and judicious practice is taught properly; or, in other words, in which clinical instruction is given as it ought to be. Baglivi has well observed, "*tota medicina est in observationibus*;" but our students are left unaided in the only rational and safe mode of learning the nature and treatment of diseases. There is no hospital in London in which the history of diseases is correctly and fully taken down, or where students can acquire a correct knowledge of practical medicine or surgery.

It is true, that in some hospitals *notes* of cases are taken by the physician, surgeon, or their assistant; but these *notes* are an outrage and disgrace to medical science; and lest students should derive any advantages from them, the books in which they are indited are locked up, like the mysterious leaves of the Sybils. In Edinburgh, Dublin, Glasgow, Paris, and Vienna, full and accurate reports of all important diseases are made; the professor prescribes, the student copies the history of each disease and its remedies, and the teachers explain the symptoms, the diagnosis, prognosis, and treatment, while the sick are under cure. Besides, in many of the foreign schools, the older students are allowed to treat cases under the eyes

of the professors, and thus acquire a rational knowledge of disease.

In pointing out the defects and abuses in the metropolitan schools and hospitals, we know we shall incur the displeasure of functionaries, whose culpable negligence we expose; but this we despise. Our ardent and sincere desire is, that this country should be second to none in medical science; and that it should equal, if not excel, other nations in this particular, as it does in power, wealth, and happiness. We are well aware, that great allowance must be made for hospital physicians and surgeons who are extensively engaged in private practice, in this great metropolis; but we are grieved that they should be so far behind their contemporaries in the march of medical science.

An outcry has been vainly attempted to be raised against the necessity and utility of attending lectures; but this is manifestly ridiculous in the eyes of all who are properly acquainted with the science of medicine. The unanimous opinion of all the faculties of physic and surgery in the civilized world is opposed to this gratuitous and most erroneous assertion. It is said that lectures are useless, because the information contained in them can be procured in systematic works; but we deny the premises and conclusion of our opponents. We do not know any works, either national or foreign, which contain the principles and practice of the healing art; and all the heads of universities and colleges are of our opinion. Hence the universal en-

forcement of the courses of study for qualification in medicine and surgery.

The idea of supposing that any student, however intelligent, possesses a library sufficient for the acquisition of a proper knowledge of medicine and surgery, and such as enables him to excel his respective teachers, whose research and ability have obtained the privilege they enjoy, is one of the most insane ideas that ever entered the head of one who professes to guide the stream of medical science. It will be swallowed by all unacquainted with the difficulties of acquiring competent information for the safe and scientific practice of the healing art, but it will be universally scouted by all who are able to form a correct opinion on the subject.

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#### MEDICAL SOCIETY OF LONDON.

*Monday, Oct. 1, 1832.*

DR. BURNE, President, in the Chair.

A VOTE of thanks was unanimously passed to Mr. Field, the late Registrar, for the zeal and ability he displayed in the discharge of his duties.

Mr. Roberts related an interesting case of neuralgia in a lady, which gave rise to a discussion, whether the fascial kind was in general functional or organic.

Dr. Whiting related a case, in which the disease was organic. Sir Charles Bell was consulted in this case, and had predicted the nerves involved, which were found disorganized on dissection.

Mr. Kingdom described another case of a lady, in which the pain was most exasperating in the anus, in which a cure was effected by carbonate of iron, after other forms of this medicine had failed, as also various other medicines.

Dr. Whiting mentioned the particulars of a complicated case of disease of the heart, in which there was considerable enlargement of the organ, and the pulse only thirty in a minute. The sufferer was a man aged about thirty.

Mr. Kingdom then adverted to the influence of gymnastic exercises on young and delicate persons, in reference to inducing organic disease of the heart, and to the notion that young persons have their muscular powers of the system.

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#### MANŒUVRES OF BOARDS OF HEALTH.

WE perceive, by a printed paper which has been handed to us, that the substance of the official reports from Dantzic, drawn up and forwarded to this country by Dr. Hamet, during the epidemic there last year, are at length to be laid before the public, by permission of government. To most of our readers it must appear passing strange that, while the curious reports from our Russian missionaries were blazoned forth, at the public expense, in every possible direction, the publication of details anxiously looked for, from a gentleman who had been sent, about the same time, to another point, should only *now* be about to appear under permission. For ourselves, we cannot say that we have been at all surprised at this, nor are we surprised that Dr. Hamet is undertaking the publication himself, with a certainty of losing by it, seeing, as we did, that instead of (to use a *turf* phrase) *riding to order*, he preferred adopting the honourable line followed by all the medical men sent from France on similar investigations; and that he showed our wise men of colleges and quarantines that contagion, as far as regarded cholera, was a mere bugbear;—for which, most assuredly, there is no pardon for him from those who made the atrocious proposal that the houses of the sick should be MARKED WITH A BLACK MARK; a proposal which so clearly proved the

fitness of those who made it to be the inmates of a lunatic asylum, or that they should be consigned to the director of a tread-mill. Dr. Hamet must feel, we are sure, that he has been all this time under a cloud which it is his bounden duty to his department, and the profession at large, to remove now, by proper explanations. Dr. Hamet had not been, when called upon, one of those accused of entering on an investigation with foul hands; and if he has not received honours and promotion, we feel persuaded he will make it appear that were such the rewards always of zeal and professional integrity, he would not have failed to obtain them.

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#### THE SUPPRESSED PARAGRAPH.

WE should but ill perform our duty towards the public were we to omit placing on record a specimen of the foul play which has been practised by the getters up of documents proving cholera to be a highly communicable disease: the circumstance took place last year, when the public looked, with intense anxiety, for authentic information upon whatever related to that disease.—In what are entitled the “Papers,” published on the subject of cholera in August, 1831, by the first board of health, a copy is given, at p. 27, of a document stated to be “*Second Report from Drs. Russell and Barry*,” but in which the following paragraph is not to be found, though contained in the original manuscript: “A Dr. Blank 2dus, who was sent by the government, some weeks before the breaking out of the present epidemic, to inspect the barks then approaching this city (Petersburg), had his windows broken. We have been just informed by a most respectable physician, that he is said to have destroyed himself by poison, having been threatened with arrest, under an accusation of having taken money to allow the infected barks to pass. The facts of his mission and his death are quite certain; the other particulars may or may not be true.”—Then it is

stated, in a note—"Dr. Blank was a Jew. The leading particulars have since been communicated to us by high authority."—Here was sufficient, in the manuscript copy, to induce our government to believe in the reality of such a thing as contagion; but lo! it is suppressed in the printed reports:—why?—because it would not bear the light, there not being any truth in this bribery story of letting infected vessels pass; and, if published, it was well known that it must quickly have been contradicted. Not a word of this statement is to be found in the excellent work of Dr. Lefevre, physician, during the epidemic at Petersburg, to our embassy there:—a gentleman, by the way, who declares that he ascertained many of the statements made relative to the contagion of cholera in the above city to have been "DESIGNEDLY FALSE." We wish that he had entered a little into particulars as to who the culprits were.

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THE SECRETION OF MILK FROM THE BREASTS NOT SUSPENDED DURING THE ALGID STAGE OF CHOLERA, AS THE OTHER SECRETIONS ARE.

WE believe that it has been observed in this country that, in nurses, milk seemed to be supplied from the breasts during an attack of cholera in sufficient quantity for the support of the infant. In Paris a paper on the subject has been lately read at the Academy of Medicine, and more facts have since been brought forward showing that lactation may go on freely, during a very severe attack of cholera, and when there is little or no pulsation at the wrist.

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THE BLOOD OF PATIENTS IN THE ALGID STAGE OF CHOLERA.

WE have been disappointed in not finding that M. Lecanu of Paris, so celebrated for his researches in animal chemistry, has not been able to carry his experiments on the blood of cholera patients to a satisfactory extent: this gentleman has as yet only been able

to satisfy himself as to the fact that the blood taken from a patient in the cold stage contains double the quantity of *matières fixes* which that fluid contains in its normal state.

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P R E F A C E

TO THE  
REGULATIONS OF THE APOTHECARIES,  
Published since our last Number.

*Apothecaries' Hall, London,  
August, 1832.*

THE Court of Examiners of the Society of Apothecaries of London have not found it requisite to extend, or materially to alter, the course of study laid down for observance last year, but have contented themselves with making some few additional prefatory remarks, and with again earnestly requesting especial attention to several important points that are but too frequently overlooked by the student, as well as by those whose duty it is to direct his studies.

It can need no argument to prove that the Apothecary should have a sound and liberal education, and be practically acquainted with the duties of his profession, when it is considered that he ministers to the great mass of the people in the function of the physician, and by the usage of society has the immediate superintendence of the public health entrusted to him. In the metropolis and in the large provincial towns, he can be aided in cases of difficulty by the learning of the physician; elsewhere he cannot avail himself of such valuable assistance; but in cases of danger, which are of frequent occurrence, he is obliged to rely exclusively upon his own resources, and can therefore alone be sustained under this awful responsibility, by a well-founded reliance on a knowledge of his profession.

The medical education of the apothecary was heretofore conducted in the most desultory manner; no systematic course of study was enjoined by authority, or established by usage;

some subjects were attended to superficially, and others of great importance were neglected altogether. In their endeavours to remedy these defects, the court of examiners have been solicitous to proceed with the utmost circumspection, advancing progressively to the end in view, guided by their own experience, and aided by suggestions offered for their consideration.

Before the student enters upon his professional studies, it is indispensably necessary that he should have received a classical education, as in addition to the advantages which result from the mental discipline such an education affords, he will find a familiar knowledge of Greek and Latin imperatively requisite, to enable him to understand the terms of art employed in medicine and its associated sciences, derived almost exclusively from those languages, and to comprehend and also retain the information imparted to him by his teachers.

An acquaintance with the mathematical sciences, also, is scarcely less necessary to enable the student to understand the admirable structure and functions of the human body, and to acquire habits of correct reasoning on the complicated phenomena of life and disease; and since many valuable contributions to professional literature have been made in the French and German languages, it is desirable, when opportunity offers, or circumstances will permit, that he should likewise be instructed in those languages, so as to be enabled to read and translate them with facility.

It is obvious that an education of this extent cannot be obtained in the limited time usually devoted to scholastic studies. The court therefore advise that the apprenticeship, required by the act of parliament, should not be entered on till the age of seventeen, and that during the two succeeding years, especial care should be taken to keep up and improve, by daily reading, the knowledge previously acquired.

Parents, in selecting a practitioner

with whom to place their sons, should ascertain that he is *legally qualified* to practise as an apothecary, and also satisfy themselves that the nature of his engagements will permit him to regulate and superintend the studies of his pupil. A systematic course of study should be arranged, by which the pupil may be conducted progressively from elementary principles to the observance of disease, neither wasting his time by exclusive attention to practical pharmacy, nor employing it with as little profit in a premature attendance on the sick. He will thus be enabled, at the age of twenty-two or twenty-three, to present himself for examination. The law certainly allows him to undergo his examination at twenty-one, but considering the nature, variety, and extent of his studies, and that he is not likely, at that early period of life, to have an opportunity of commencing practice, a little further delay will be no present sacrifice, and cannot fail to be productive of great eventual advantage to him.

In his attendance on lectures and at the hospital, the student requires the guidance and aid of his teachers; nor can it be doubted that the learned individuals, who occupy the public chairs as lecturers, will be always ready to afford their assistance by pointing out to their classes the course of reading which will best illustrate their respective lectures, and also by ascertaining, in periodical examinations, the progress each pupil is making in his studies. The teachers of chemistry likewise would most essentially benefit their pupils by devoting some portion of each course of lectures to their instruction in chemical manipulation and practical analysis, thereby enabling them to carry on with facility and accuracy such chemical inquiries and investigations as in their subsequent professional life they may either be desirous, or be called upon, to make. The court are aware that in large classes some difficulties will be attended upon a compliance with these suggestions, yet they do not hesitate

to press them upon the serious attention of the teachers, from the well-grounded conviction they entertain, that great advantage to the student would result from their being acted upon.

There is another most important point to which the Court of Examiners solicit the especial attention of the physicians connected with hospitals and recognized dispensaries. Under their instruction, at the bedside of the patient, the student ought to learn the practical duties of his profession, by becoming acquainted with disease not merely as described by authors, but as it actually appears in nature under all the various modifications of sex, age, and temperament. The clear, distinct, and vivid impression made upon the student's mind by clinical teaching efficiently conducted, renders such instruction especially valuable, and the court are most earnest in their desire that students should be encouraged to avail themselves of it with the utmost diligence; in furtherance of this object they have now taken measures to place the recognition of dispensaries upon such a foundation as will afford to the pupil the benefit of sound practical instruction.

The Court of Examiners have too much reason to know and lament, that notwithstanding all their precautions, the attendance upon lectures, but more especially that upon hospital practice, is often grossly eluded or neglected; and they deem it their duty to express a hope that the teachers, with whom the correction of this abuse must principally rest, will turn their attention to the removal of an evil of such magnitude. It would be competent for them to insist upon periodical signatures from their respective classes, proving that the pupils are actually in attendance; and it would be equally in their power, entirely to withhold certificates from those who have neglected their attendance, or to qualify the testimonial in such a manner, that the court may apply to those who have been negligent, that degree of rigid scru-

tiny, which the justice of the case might appear to demand.

By defining the extent of a course of botanical lectures, and by requiring them to be attended during the only season when this science can be practically studied, the court have had in view not only the more efficient instruction of the student in this subject, but also the advantage of separating it from those studies which the pupil must necessarily pursue during the winter session: and although the court have been induced to leave the time of attendance upon midwifery lectures optional, they, nevertheless, hope, that during the comparatively leisure period of summer, the student will devote himself to the study of midwifery, and of forensic medicine, as well as botany.

Although a bill, regulating the study of anatomy, and legalising the dissection of the human body, has lately received the sanction of the legislature, the court have deemed it premature to enforce upon the pupil the practice of dissection by any new and positive regulation, both because they are aware that students in general have not neglected to acquire as much knowledge of anatomy, through this source, as the difficulties hitherto existing permitted, and because they are desirous of first observing the operation of this new enactment.

Among the regulations of 1830, the court deemed it expedient to endeavour, by periodical registration, to secure a consecutive and regular attendance on the several courses of lectures required by them. This important regulation the Hall of the Society afforded them the ready means of carrying into effect with students of the schools in London; but without the assistance of gentlemen attached to those in the provincial towns, it could not have been adopted in them; the court are anxious, therefore, to avail themselves of this opportunity of returning their thanks to those gentlemen at the several schools who so readily and cheerfully entered into their views,

and who now give them their kind assistance by superintending the provincial regulations.

[The following changes are made in the regulations of last year:—

Two courses of *materia medica*, or three courses delivered by the Professor at the Hall (candidates being apprentices to the members of the same), each course consisting of thirty lectures.

Botany, to be attended between the 1st of April and 31st of August, or two courses delivered at the Society's Garden, will suffice.

Dispensaries, properly conducted, on or before 1831, will be recognized; and it is not necessary that medical schools should be attached.—Eds.]

## Hospital Reports.

### ST. THOMAS'S HOSPITAL.

#### ANEURISM OF THE AORTA.

JOHN SHAW, a scrofulous-looking subject, aged 36, states that he has been ill for four months, and came into Jacob's Ward, of this hospital, July 5th, under Dr. Elliotson. His chief occupation was carrying heavy loads, such as sacks of corn, &c., &c. When first attacked, he experienced a pain on the right side of the sternum, darting upwards, which, at the present, extends along the whole breadth of the thorax. This is accompanied with cough and dyspnoea, increased from the slightest exertion. He experiences a pain in the back part of his head occasionally, which he states is of a throbbing character, and troubles him most when lying down. When he coughs, especially if rising from his bed, he feels a pulsation just above and below the sternal end of the right clavicle. No pulsating tumour can be felt by the fingers; but, by auscultation, there is an impulse heard, much stronger than that of the heart, opposite to the first bone of the sternum; and from percussion, a dull sound is heard on the top of the sternum: a bellows sound,

also, is heard over the region of the heart, when in the erect position. He cannot lie long on either side, but lies best upon the left. At the commencement of his disease he could not lie at all on the right side. The sound communicated to the ear, from the stethoscope, is that of air passing through compressed tubes. Pulse strong, and of a vibrating character.

*V. S. ad l'bj.*

7. Pain in the chest relieved from the bleeding. Dyspnoea remains much the same, which appears owing to the pressure caused by the aneurismal sac upon the trachea; blood much buffed.

13. Has been much troubled from dyspnoea and cough; rest disturbed at night.

*V. S. ad l'bj.*

8 P. M. Blood buffed; other symptoms the same.

11. Appears this morning a little easier; can get no rest, owing to dyspnoea and cough. His voice, all along, has had a peculiar harsh thrill, but this morning it is more evident. When dyspnoea comes on, his breathing is of a stertorous nature; his veins appear much larger than usual: those on the left side larger than the right; pulse small, 76.

From this period, until the 21st, his symptoms remained stationary.

*R. Tinct. lobeliv ʒj.*

*Mist. camph. ʒiiss. haustus. Au quaque hora, vel urgenti dyspnœa sumendus.*

24. He cannot lie down without feeling a suffocating sensation, bringing on dyspnoea, with cough. Two hours after taking the medicine, giddiness, with slight pain in the head, came on.

*Habeat.—Hydro-sulph. ammon. ʒvj. ter die.*

*V. S. ad l'bj.*

27. The symptoms remain the same.

*Habeat.—Hydro-sulph. ammon. ʒvij. ter die.*

31. He fancies himself a little

easier to-day; complains of a slight pain in his chest.

*Habeat.*—*Hydro-sulph. ammon. ℥x. ter die.*

*V. S. ad 3xij.*

August 3.—Continues much the same; blood buffed and cupped.

*Hydro-sulph. ammon. ℥xij. ter die.*

7. His cough and dyspnoea have become worse since last visit. He has felt very sick since he has taken the last dose.

*Hydro-sulph. ammon. ℥xiv. ter die.*

Should the medicine make him sick, Dr. Elliotson ordered the sister to decrease it.

*Hirud. xij. sterno.*

10. Has been sick several times since last visit; the other symptoms remain the same; bowels continue regular.

*Habeat.*—*Hydro-sulph. ammon. ℥xij. ter die.*

14. Has been obliged to discontinue the medicine, owing to constant sickness. He appears gradually to lose flesh; finds himself very weak. Pulse small and feeble, 80.

*Habeat.*—*Vin. rub. ʒij. quotidie.*

16. Appears very much exhausted, owing to excessive fatigue. He is obliged to get up several times in the night, to relieve a suffocating sensation, brought on by lying down.

*R. Mist. campho. ʒiiss.*

*Tinct. opi. ℥xxxx.*

*Sp. ether. nit. ʒij. pat. haustus singula nocte sumendus.*

28. The symptoms have continued much the same since last report; still continues to lose flesh; his cheekbones become very prominent; rest continually disturbed at night.

*Solut. muriat. morphicæ ʒiiss. s. n.*

*V. S. ad 3x.*

30. His rest continues to be broken, but in other respects he fancies himself a little better. Has felt very sleepy all day.

8 o'clock. This evening, as he was walking about the ward, he was taken with a sudden fit of coughing, when,

as he approached his bed, he fell on the ground: at the same time blood issued from his mouth and nose. Three minutes had scarcely elapsed, when death put an end to his sufferings.

*Sectio Cadaveris.*—Upon opening of the thorax, an aneurism was found at the junction of the arteria innominata with the aorta, about the size of a pullet's egg. The walls of the sac were very thin. The posterior part of the first bone of the sternum had become partly crooked from the pressure of the aneurismal sac upon it. The trachea, upon being opened, presented a large lacerated orifice, through which the finger might be passed, which communicated with the aneurismal sac. Upon puncturing the vena innominata of the left side, and introducing a probe, it was found completely obliterated, owing to constant pressure from the aneurism. That part of the aorta which is contained within the pericardium was found enlarged, and its walls thickened. The posterior lobes of the lungs were diseased, whilst the anterior remained healthy, which Dr. Elliotson remarked was a singular fact. The vena azygos was found considerably enlarged; so likewise was the superior intercostal vein: these, together with the thyroïdal, no doubt assisted materially in carrying on the circulation. The use of the stethoscope, Dr. Elliotson remarked, was the only means of forming a true diagnosis of this disease, when no pulsation presented itself, or could be felt externally; and it was from the violent impulse conveyed by this instrument, together with the other symptoms, that satisfied him it was aneurism. The other viscera were healthy.

#### HÔPITAL DE LA PITIÉ.

(FROM OUR SPECIAL CORRESPONDENT.)

*Case of Hydrocele successfully treated by the Hydriodate of Potassa.*

ABOUT the commencement of August a patient was received into the Vene-



real Hospital, labouring under the above complaint. M. Ricord, the surgeon, in one of whose wards he was placed, considered this a fit case for adopting a new mode of treatment, instead of tapping with the trocar and injection of wine and water as heretofore generally pursued. The patient had been ill for some time, and, on his admission into the hospital, the hydrocele had already acquired an extensive size. M. Ricord ordered him to take a solution of the hydriodate of potassa in distilled water, one grain of the former in four ounces of the latter three times a-day, gradually and cautiously increasing the dose of the hydriodate to fifteen grains in the twenty-four hours, and by this treatment the patient was effectually cured of the hydrocele in the course of five weeks. The same method is being adopted in another case, the details of which shall be forwarded for your Journal as soon as the result shall be known.

## BOOKS.

Animal Mechanics, applied to the Prevention and Cure of Spinal Curvature, and other personal Deformities. By T. Sheldrake. Part I. 8vo. pp. 347. Several wood-cuts. London, 1832. Reushaw and Rush.

The Anatomy of the Horse, embracing the Structure of the Foot. By William Percival, M.R.C.S., Veterinary Surgeon in the 1st Life Guards. 8vo. pp. 1832. Longman and Co.

## NOTICES TO CORRESPONDENTS.

All works intended for our list of books must be received on or before Wednesday; and all communications, from Thursday to Tuesday: both must be forwarded free of expense.

To our advertising Friends.—Our terms for advertisements are 25 per cent. less than those of similar journals; and all communications of this description should be forwarded on Wednesday. We have to apologise for some ludicrous, though provoking typographical errors in our last, and these arose in consequence of the Editor not having seen a proof sheet of the advertisements. Such unpardonable blunders shall not occur in future. A line ("Medical Agency Office,") belonging to another advertisement, was appended to Dr. Collier's. We need not inform our readers in town, that the Doctor is more profitably employed than as a medical agent. The line alluded

to belonged to Mr. Lane, the respectable medical agent, whose anger must have been excited, had he not the happiness to be possessed of an abundant stock of good humour. We can assure our friends that such mistakes cannot occur hereafter, as this Journal will be printed henceforth by the old and justly famed press of Davison, Simmons, and Co.

Dr. Blake.—We shall be happy to comply with the request.

Mr. Jackson.—We find it impracticable to avail ourselves of the generous offer, for which we are much obliged.

Mr. Drury.—Numerous other gentlemen have expressed a similar desire that the profession should assist Dr. Ryan, but we have declined inserting their communications, as they would occupy our whole publication.

W. H.—There is no remedy. The parish is not legally bound to pay any surgeon for attendance on the poor, except the gentleman employed by them. We have known instances, however, in which remuneration was given.

Fair Play.—We have noticed the unblushing piracy of some of the weekly newspapers, and cheap publications, in which whole pages of our original matter are given without acknowledgement, and sometimes placed under the title of a contemporary. This unprincipled conduct must arise from prejudice or dishonesty.

Mr. S.—The reply is no answer to the complaint of our Correspondent. Articles should not be promised and withheld. The omission alluded to arose from press of matter.

An Independent Practitioner.—Though we look upon the institution as a complete failure, it is certainly well intended, but it cannot succeed.

G.—Should he do so, he would be most assuredly prosecuted by the Apothecaries' Company. The penalty will be a year's imprisonment, at least.

Paul Pry.—We do not care a farthing if 500 "Penny Lancets," "Doctors," and medical catch-pennies, were published daily or hourly. Such things can never be interesting to well-educated members of the profession, nor to the enlightened part of the public.

A Student.—We shall not advise our correspondent. We refer him to the list of medical schools in our last Number.

An Eye-witness.—It shows great weakness on the part of a public medical school, one that professes extraordinary liberality, to call in the aid of the police to prevent the distribution of cards and syllabuses of private lecturers.

A reformed Bat.—Many thanks for the information; we shall turn it to account.

A Friend to Justice.—The attacks on Sir Wm. Blizard and Mr. Stanley are too flagrant to require serious notice.

Dr. Gordon Smith's communications will be duly attended to.

Crisis.—The letter with this signature is under consideration.

## London Medical and Surgical Journal.

No. 37.

SATURDAY, OCTOBER 13, 1832.

VOL. II.

## LECTURES

ON THE

## PRINCIPLES, PRACTICE, &amp; OPERATIONS OF SURGERY,

Delivered at the University of London,  
On Thursday, October 4th, 1832,

BY

PROFESSOR SAMUEL COOPER.

## LECTURE II.

GENTLEMEN,

THE time did not allow me, yesterday evening, to offer you any advice concerning the books which I should recommend you to consult, as a means of promoting your advancement in the knowledge of surgery. One thing I am quite assured of, and all men of experience know it, that the only work to be entirely depended upon, is the book of nature: this is always correct. You must not, therefore, place entire confidence in any written accounts of surgery, nor in any lectures, however great the abilities of the author or lecturer; but you must study the diseases and injuries of the human body, as they display themselves in the wards of an hospital: the valuable kind of book, which this University has not at present, but which, according to all appearances, it will possess in the course of the ensuing year. In such a book, gentlemen, you may read the lessons of experience, and then compare those lessons with what you find in common books, and what you hear at lectures. Those lessons are entitled to implicit belief, and the statements of lecturers and writers frequently require to be corrected by them.

However, on account of the "ars longa, vita brevis," no man, great as his diligence might be, would be able to glean all the valuable instruction now in existence concerning surgery, were he only to collect what his own personal experience reveals to him. The practice of the largest hospital, during the short space of

time it is usually attended,—nay, during a man's longest existence, is a mere drop in that immense ocean of experience, which has been accumulating for ages. You must avail yourselves, therefore, gentlemen, of all the facts, observations, and improvements brought to light by the genius and labour of the past and present generations. Now, the principal storehouses of such information are books, in which the accumulated knowledge of many ages is preserved. If you should have an idea, that you can attain the character of well-informed surgeons, without taking the trouble to consult all the sources of instruction at hand, amongst which are good practical books, you will certainly be baffled. The Dictionary of Practical Surgery, a book on which I have expended immense labour, will inform you of the best publications upon every subject interesting to the surgical student or practitioner; and, as the copyright does not belong to me, I may venture to say, without exposing myself to the suspicion of being covetous, that you will find it the greatest storehouse of the collective surgical wisdom of our ancestors and of the living generation that has ever been built. The midnight oil that was consumed in the labour, I imagine, would freight a Greenland ship of moderate tonnage, and the ink expended be almost enough to float it.

As an elementary book, I should like Dr. John Thomson's work on Inflammation, if it were corrected down to the present time; but many of the most important parts of surgery are omitted in it, and, I believe, it is now so scarce, that you will have difficulty in getting a copy of it. The First Lines of the Practice of Surgery, which I wrote and designed as an introduction, now stands in need of some revision; though many parts of it, I believe, are not affected by any observations, or improvements, made subsequently to the date of the last edition, and so far it will be found useful by beginners.

John Hunter's Treatise on the Blood, Inflammation, and Gun-shot Wounds, should be studied by those, who have made a little more progress; for novices will be rather perplexed than enlightened, by some of the doctrines expounded by that very original and penetrating observer, who may be said to have surpassed

every other labourer, in giving to modern surgery a truly scientific character. Gentlemen, it would be a disgrace to me if I were not to say, that, if you do not study the writings of John Hunter, and have not a spirit to admire his talents and discoveries, you cannot have the disposition requisite to make you pursue surgery rightly, that is to say, not merely as a source of emolument, but as a subject abounding in the most interesting and philosophical information.

Gentlemen, the very practical lectures of Sir Astley Cooper, and the still more elaborate ones of Mr. Lawrence, all of which are published in one form or another, may be consulted with advantage. I may say the same thing of Harrison's *Surgical Anatomy of the Arteries*, and of some parts of Hargrave's *Operative Surgery*.

Besides hospital attendance, and good practical books, I must not forget to recommend, as a principal means of improvement, the embracing of every opportunity to examine morbid parts in the dead body, or after their removal from the living subject by operation. For the sake of extending your knowledge of disease, I also refer you to the rich collections of pathological preparations in the Royal College of Surgeons, in this University, and in various other museums in the metropolis. As for the pathological drawings at this institution, how can I sufficiently praise them, or do justice to their merit? I believe they are not surpassed by any in the world; their size, their correctness, their number, the labour and skill bestowed, not only on their execution, but on the dissections required for them, are circumstances filling me with greater and greater admiration the more I think of them. These performances are enough to place Dr. Carswell amongst the most successful labourers in pathology, who have yet appeared.

Gentlemen, when you attend hospital practice, which it is not advisable to do until you have made some progress in anatomy, chemistry, and physiology, be sure to take notes of every interesting case. This plan will accustom you to make observations yourself, and the memoranda, thus collected, will be of use to you as long as you live. I also recommend you to press the surgeon for clinical instruction, which is of great value, when given by a man of experience, observation, and judgment. Strictly, all clinical remarks should be made while the patient and the disease are before the students; for it is only in this manner that they will be completely able to judge of the truth of the observations, by comparing them with the facts, which the cases exemplify. Many lectures, now termed clinical, scarcely deserve the name, as they are rather formal and prepared discourses on chosen subjects, with more or less reference to cases not actually before the class.

Gentlemen, besides the introductory matter, which I have now delivered, some preliminary subjects yet require to be explained, before the consideration of any particular part of surgery

can be entered upon. Those subjects, I know, are treated of by the professor of medicine, and in a much better manner than it will be in my power to do; but, as certain views of them materially facilitate the comprehension of the doctrines of surgery, I cannot altogether omit them.

Gentlemen, all the injuries and diseases of the human body are sometimes distributed into three great classes, *physical*, *organic*, and *functional*. This division of the subject I particularly recommend you to keep in mind, as resting on the basis of truth, and opening to you at once a very extensive view.

PHYSICAL INJURIES AND DISEASES arise from mechanical causes. We see them exemplified in wounds, produced by a cutting, piercing, or contusing weapon; in fractures, arising from blows, or the forcible elongation of the texture of bones; in dislocations, caused by violence; in hernie, or protrusions of the bowels, occasioned by the compression of them by the diaphragm and abdominal muscles, and the want of adequate resistance at certain points of the abdomen.

The generality of physical injuries are caused by the action of external bodies, but some depend upon the action of parts situated within the animal machine itself. Thus, the violent contraction of the muscles may break the bones and tendons, and even lacerate their own fibres; still the injury is produced by a mechanical effort, and it makes no material difference in the nature of the case, whether the agent that produces the mischief be within the body, or external to it.

In the instance of extraneous bodies, lodged in different parts, it is of little consequence, in this respect, whether they are introduced from without, or formed within the organs themselves, by the operation of some physical or chemical law. Their lodgment leads equally, in both instances, to the mechanical irritation and disturbance of the parts which they touch. Physical injuries are not essentially connected with life, for they may be imitated, or rather produced, in the dead body, parts of which may be divided, or displaced, just like those of the living subject. Physical injuries and diseases may be said, indeed, to be generally produced independently of life, the operations of which are only concerned in the production of certain changes and effects, originating subsequently to those of a mechanical nature.

With respect to an *organic disease*, the expression is generally received, in this country, as synonymous with *disease of structure*; but, on the Continent, many pathologists do not apply the term to every impairment of texture, but only to those in which the change of organization—the alteration of structure—is so complete, that the original nature of the part affected is irreparably lost,—sometimes not even capable of being recognized again; or there is actually a formation of new substances—new tissues in it, which have nothing analogous to them in the healthy living system. A mere alteration in the colour, volume,

density, and arrangement of the elementary tissues, does not seem to all pathologists sufficient to constitute an organic affection; for common inflammation may give rise to changes of this kind, which may only be of temporary duration, and by no means incapable of removal. In every organic disease, corresponding to the view which I have mentioned, the action of those capillary arteries, whose office is to deposit the elementary constituent atoms of the part, must be totally changed and perverted; but the nature of the circumstances, conducive to the origin of such disorder, is often a complete mystery, and, in particular, we are frequently in the dark concerning the causes which determine the specific character of the affection, and which decide whether it is to be one of tubercles, fungus hæmatodes, cancer, melanosis, encysted tumour, bony deposit, or some other modification of organic disease. One feature, then, of organic diseases, as defined according to the principles which I have explained, is their general incurability. This is particularly the case when they occupy deep situations, out of the reach of any surgical operation; and even when they are superficial, they can hardly be said to admit of cure, as the part affected must be in some mode or another extirpated or destroyed.

All organic diseases consist either in an alteration of natural textures, or in the spontaneous production of new substances, sometimes having no likeness to anything in the human body, and sometimes bearing more or less resemblance to some of its primitive structures. Frequently a cancerous tubercle is formed in the cellular substance between the different portions of the mammary gland: it is an adventitious production, quite foreign to the texture of the gland itself—a new formation. In other instances, the structure of the gland itself is deeply affected; its nature is completely altered; and it is itself converted into the cancerous tissue. Or, it might be more correct to say, that a new substance being formed, the natural structure is absorbed, seemingly in consequence of the pressure of the adventitious matter around or within it.

Now, gentlemen, if we employ the term *organic*, in the sense which I have explained, the epithet *structural* might be convenient to denote those alterations of structure which are only temporary, or not absolutely incurable.

Gentlemen, allow me next to offer a few general remarks on FUNCTIONAL DISEASES. If health is to be defined *the free, easy, and regular performance of the several functions, which serve for the maintenance of life, for keeping up the relations of the individual with the external world, and for the continuance of the species*;—Disease, as the reverse of this state, may be said to be a *palpable alteration, either in the position, size, or texture of parts, so as to interfere with some of the functions in question, or else an imperfect or irregular execution of one or more of those functions, independently of any visible change in the*

*position, size, or texture of the organs, which naturally perform them.*

I lay an emphasis on the expression *visible* change of texture, because the doctrine is sometimes broached, that, when there is anything wrong in function, there must always be some defect or change in structure. The action of a steam-engine, or the movement of a watch, is certainly never interrupted or deranged without some fault in its machinery. Hence, it is inferred, that if no imperfection existed in the structure and mechanism of the human body, its functions would suffer no disorder. But, gentlemen, we are to recollect, that the human body is a living machine, and the watch or steam-engine a dead one; that every organ in the animal economy is connected with other parts of the system, not only through the medium of vessels, but through that of nervous actions or sympathies, to which there is nothing analogous in any work of art. This consideration alone must make an important difference in every estimate of the respective derangements of the human body, and of any inanimate piece of mechanism.

Every organ has its own duty to perform; yet its efficiency depends not altogether upon itself, but partly, and sometimes very materially, upon the condition of other organs, with which it naturally sympathises. If each individual organ were independent of the rest of the system, we should have as many lives as a cat, and perhaps scarcely ever be quite dead. One organ might become diseased and perish; but this would not affect the others, whose functions would go on as quietly and perfectly as they did when the system had sustained no impairment or loss in any part of it.

Things are destined, however, to be otherwise; and hence the functions of no organ can be rightly comprehended, if studied without reference to the action of the whole system of functions, exhibited in the living animal economy. Neither is it possible to understand the nature of disease in general, without the constant recollection of the same series of connected operations.

These reflections, and a few facts, to which I shall briefly advert, make me, then, a believer in the doctrine of the possibility of functional disease, without any disorder of structure.

In amaurosis, or loss of sensibility in the nerves of vision, sometimes caused by the presence of worms in the intestinal canal, or by gastric disorder; in convulsions from a similar cause; and in syncope, from the impression of certain odours on the olfactory nerves; do we not recognize facts which bear upon this disputed point? But, gentlemen, if there were not these and various other cases which might be quoted, one familiar example, often adverted to, would keep me from renouncing the doctrine of functional disease, independent of change of structure. A person sits down to dinner with a good appetite,—some afflicting news is brought to him,—in a

moment his appetite ceases, and perhaps what has been already eaten, is rejected. The digestive organs are in an instant completely disordered. Here no time is afforded for any change of structure, and the disorder can only be one of function, produced by nervous actions or sympathies.

Gentlemen,—the CAUSES OF DISEASE are of two kinds, *proximate* and *remote*, which last are subdivided into *predisposing* and *exciting*. In books you will read a great deal about what is termed the proximate cause; but, after you have gleaned all that is said or argued about it, you will be surprised to find, that the phrase really means, in general, not the cause of a disease, but the essential changes constituting the disease itself. In medical language, however, a great want of precision of meaning may be noticed; and sometimes an assemblage of symptoms is referred to as the disease itself; and then, whatever circumstance is the immediate occasion of them, is regarded in the light of the proximate cause of the disease itself. In hernia, the *predisposing* cause is a weakness in the conformation of certain parts of the boundary of the abdomen; the *exciting cause*, the action of the muscles of respiration on the viscera; the *proximate cause*, the protrusion of the bowels themselves, which is, in truth, the disease itself; but, if the case be a strangulated one, the *proximate cause* of the assemblage of urgent symptoms is then the entangled or pinched state of the protruded bowels.

Some *predisposing causes extend their action to a great number of persons at once*; as, for instance, to all the inhabitants of a large city, province, or empire; or to a numerous body of men, crowded together in barracks, fleets, or hospitals, preparing the way for the origin of diseases, which are always of a similar or analogous nature, in all the individuals attacked.

These are sometimes called *general predisposing causes*; and most of them are diffused in the atmosphere, or depend upon the situations in which we reside. Every person, whether of the medical profession or not, is fully aware that residence in town or country, in hospitals, in barracks, in prisons, or on board of ship, change of dwelling, kind of diet, and state of the mind, are circumstances powerfully affecting the human constitution.

Another class of predisposing causes of disease comprises certain states or peculiarities restricted to individuals, as *parentage, sex, age, constitution, habits, profession, and condition in life*. These have been named *individual predisposing causes*. With respect to *extractum*, an origin from parents labouring under certain diseases, has a remarkable effect in giving a predisposition to the same diseases. Much dispute has existed about the doctrine of *hereditary diseases*; because the constitutional disorders of parents are not invariably transmitted to their children; because healthy parents frequently have an unhealthy offspring; and unhealthy ones sometimes fine

sound robust children. Yet, as parents, labouring under certain diseases, are much more likely than healthy parents to have children predisposed to similar afflictions, the doctrine cannot be said to be destitute of foundation. Hereditary disorders sometimes skip over one generation, and then assail the grandchildren, apparently proving the long duration of the propensity to them in the race. Some diseases are notorious for their frequency in particular families, as scrofula, tubercles in the lungs, gout, stone in the bladder, cataracts, deafness, encysted tumours, and hernia.

Then, gentlemen, the influence of the *different stages of life—infancy, youth, manhood, and old age*, as predisposing causes of disease, is an interesting subject, deserving your particular attention. Diseases may begin at any period of life, from that of fetal existence to that of extreme age; but every age has a predisposition to particular diseases, which seem sometimes to belong to it almost exclusively; and, at all events, show themselves much more frequently in it than in the other stages of our existence. Thus, hydrocephalus, spina bifida, hare-lip, congenital hernia, and nævi, frequently accompany the *fœtus* into the world. *From the first until the seventh year*, a child is particularly liable to rickets, porrigo, croup, scrofula, stone in the bladder, prolapsus of the rectum, incontinence of urine, worms, and all the ailments connected with dentition. After this age, or between eight and twelve, is the ordinary time for the commencement of bronchocele. *Puberty* brings with it a predisposition to inflammation of the chest, hæmoptysis, pulmonary consumption, and, in females, to all the disorders depending upon the commencement of menstruation. In the *middle periods of life*, and especially between the ages of forty and fifty, the tendency to disease of the abdominal viscera increases, and hemorrhoids, cancer, and several organic affections are more common. Lastly, in *old age*, we meet with chronic catarrh, softening of the brain (the *ramolissement* of French pathologists), apoplexy, palsy, mental decay, greater fulness of the venous than of the arterial system, deafness, cataracts, mortifications, disease of the prostate gland, and various complaints of the urinary passages.

Gentlemen, allow me now to notice the predispositions depending upon *sex*. To the generality of diseases, both sexes are equally liable. However, on account of diversities in their organization, habits of life, and employments, men are most exposed to wounds, contusions, fractures, dislocations, stone in the bladder, retention of urine, gout, and rheumatism; while women are oftener than men the subjects of cancer, bronchocele, and various nervous disorders. Males are more liable than females to inguinal hernia; while these more frequently suffer from umbilical and femoral ones. Some diseases must necessarily be restricted to one sex alone, as is plainly the case with several affecting the organs of generation,

Thus sarcocele, hydrocele, and varicocele, must be diseases confined to the male sex, just in the same way as cancer and prolapsus of the uterus, diseases of the mammary gland, and dropsy of the ovary, are exclusively affections of women.

The *structure, situation, and uses* of each part of the body have also considerable influence, as predisposing causes of disease. Thus, the lower extremities are much more subject than the upper to varicose veins, ulcers, and fractures. The weakness at certain points of the abdominal parietes, as I have already noticed, communicates a tendency to hernia. In children, the imperfect ossification of the skeleton facilitates the separation of certain parts of the bones, termed the epiphyses, a kind of accident hardly possible in the adult subject. The skin, mucous membranes, and glandular structures (excluding, however, the lymphatic glands) are particularly often the primary seat of cancer. The short, thick, spongy bones are much more frequently attacked by scrofula and caries than the long cylindrical ones, the shafts of which are often the seat of necrosis.

The *empty, or distended*, state of some organs, as the bowels or bladder, makes a vast difference in the chances of their being injured by external violence. Their full state predisposes them to be burst or lacerated. We have, in the museum, two bladders, which were burst by blows on the hypogastric region; one of them was taken from a patient of my own, a fine young man, who, in wrestling with another man, that threw him and fell upon him, met with the accident, which proved fatal, in consequence of effusion of urine, peritonitis, and gangrene of the rectum. If the bladder had not been full at the moment of the fall, no doubt it would have escaped injury.

*Certain professions and trades* are well known to create a tendency to particular diseases. The sedentary life of the studious renders them very liable to disorder of the digestive organs, nervous complaints, apoplexy, obstinate constipation, and hemorrhoidal affections. Coachmen, postillions, and others, who are almost continually exposed to rough horse exercise, form a large proportion of the subjects who have hernie, diseases of the testicle, or aneurisms in the ham.

Washerwomen, door-porters, and others, who are habitually in a standing position, abound in the class of individuals affected with varicose veins, and the ulcers of the legs connected with them.

Painters are liable to a particular species of colic, and to paralytic affections, from the absorption of lead; and chimney-sweepers are almost the only persons who are ever attacked by a cancerous disease, beginning on the scrotum, from the lodgment of soot in the rugae of that organ.

*High and low stations* in life, with all the habits commonly associated with them, have also vast influence, as predisposing causes of

disease and accidental injuries. Thus, in the poor, we notice with greater frequency, contusions, wounds, sprains, fractures, dislocations, scrofula, psora, porrigo, and some other cutaneous diseases; and though they suffer so much from rheumatism, few of them are afflicted with gout, which is the scourge of the rich, indolent, and too highly-fed classes of society.

With respect to *pregnancy*, though it sometimes suspends the progress of organic diseases, as is occasionally exemplified in cases of tubercles of the lungs, it is a predisposing cause of other complaints, as of hemorrhoids, varicose veins, and many dangers likely to arise in this state from an accidental fall, or blow, or mental alarm. Pregnancy is sometimes stated to produce a condition of the system, in which fractures either will not unite at all, or not without considerable slowness and difficulty; but, I once attended a pregnant female, who broke both bones of her leg, and they united in the course of five or six weeks, in a perfectly firm manner.

From this subject, which might be much extended by reflections on the effects of *injurious clothing, bad diet, and intemperance*, in creating a predisposition to disease, and especially on the influence of *overfeeding, indolence, and plethora*, in promoting the accession of inflammatory complaints, I pass to the consideration of *exciting causes*, which are divided into *common, or specific*.

With regard to the *common ones*, they may be diffusel in the atmosphere, be applied directly to the surface of the body, or be introduced into its cavities and tissues. As those which exist in the atmosphere chiefly concern the physician, I shall proceed at once to others, which are applied directly to the body itself. Surgery, indeed, abounds in examples of them; they are illustrated in every description of wound, whether cuts, stabs, lacerations, or gun-shot injuries; in every derangement in the situation, relations and texture of organs, produced by external violence; in the inflammation, ulceration, or mortification excited by pressure in a variety of forms; and in the chemical action of different agents upon the textures of the human body. To this class of exciting causes may be referred the *venom naturally secreted by certain animals*, and which, when they inflict a wound, is deposited in the injured part. The venom of an animal constantly gives rise to its peculiar effects upon the animal economy, and might, in this sense, be looked upon as a specific exciting cause; but its nature is very different from that of a specific morbid, or rather morbid animal poison; for it is a natural, and not an accidental production—never dependent upon disease, and never reproduced, like these other poisons, in the affections of the system brought on by it. Here you may observe the distinctions are very strongly marked.

Disease is frequently excited by *substances introduced into the cavities of the body*; this is shown in cases of poison, and of foreign bodies lodged under the eyelids, in the meatus auditorius, larynx, or cesophagus.

The *retention of various matters*, which ought naturally to be voided, is another frequent exciting cause of disease. Thus retention of urine may produce paralysis, or inflammation and rupture of the bladder. The accumulation of the menses in the womb may bring on a painful distention of that organ and vast disturbance of the health. Retention of fecal matter in the rectum or colon may excite inflammation, swelling, vomiting, and fever.

*Powerful efforts of the muscular system* often give rise to herniæ, prolapsus of the uterus, and the rupture of blood-vessels. Even the air-cells of the lungs may be lacerated by violent exertion, and a particular kind of emphysema produced. I have already mentioned, that the violent action of muscles will often tear their own fibres, break their tendons, or fracture the bones, in which they are inserted, as is illustrated in fractures of the kneecap, os calcis, and olecranon.

*One disease is frequently the exciting cause of another.* Thus, the pressure of an aneurism will cause absorption of the neighbouring bones—a wasting and disorganization of the muscles—an obliteration of large veins—and a total change of structure in considerable nerves. Ruptures and wounds of the stomach, bowels, or bladder, sometimes let the contents of these parts get in contact with the peritoneum, and a fatal inflammation of the whole cavity of the abdomen, the diseases called peritonitis and enteritis, are excited.

Gentlemen, the preparation which I now show you, is an aneurism of the aorta, the principal artery in the body. But this, the original disease, is not the only one, for you may observe, that the tumour has led to disease of other parts—to a destruction of a great portion of several of the ribs—to that of one side of the spine, so as to expose the medulla spinalis, and to ulceration of the trachea, in which the tumour ultimately burst. This preliminary matter will be resumed, gentlemen, on Monday evening.

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S E L E C T I O N S  
FROM THE  
L E C T U R E S  
OF  
SIR GEORGE L. TUTHILL.

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HYSTERIA—HYSTERICUS.

THIS disease generally begins with a rumbling noise in the abdomen, and a sensation like the rising of a ball from the intestines up to the stomach, and thence to the fauces, where it produces a sense of suffocation, and the patient soon afterwards becomes insensible and convulsed. There is also frequently a copious secretion of limpid urine, and the spirits of the patient are very irritable, being sometimes elevated and at other times depressed, with

alternate fits of laughter and crying, which come on scarcely spontaneously, and more in a convulsive manner. Every case of hysteria has not the same symptoms. It generally, however, comes on by paroxysms, and is produced by an unequal flow of the spirits, and is accompanied by transient giddiness, fits of weeping and laughter, fulness in the chest and palpitation of the heart, and a sense of fulness in the descending part of the colon; this gradually ascends, accompanied with distention, like a ball rising from the abdominal viscera into the stomach, and thence into the fauces, termed *Globus Hystericus*. This remains pressing upon the larynx for a short time, when the patient becomes faint, and the body becomes agitated; the trunk is contracted, and the limbs are affected with clonic spasm. There is often a constant motion of one arm, or the patient strikes the breast with the hand closed; a temporary delirium is present, and a frothy saliva oozes from the mouth. Sometimes there are remissions, when the spasms abate, and the patient seems in a profound sleep, during which there is frequent sighing and eructation of wind, and thus the patient gradually recovers, having no recollection whatever of the fit. Sometimes there is no clonic spasm, and the patient merely remains insensible; at other times, there is no insensibility; occasionally, however, all the symptoms named are present; at other times only a few. The duration of the fit is variable from one minute to one hour. Sometimes before the fit there comes on a sudden and copious flow of urine. There is sometimes a pain in the back or epigastrium; and when violent, the pulse becomes feeble, and a cold, clammy sweat bedews the surface of the skin; at other times, the pain is situated in the head, accompanied with hiccup and vomiting. There is sometimes a sensation of stricture across the chest, and tonic spasm occurs during the fit, and the navel is retracted. Before and after the fit, there are slight symptoms of delirium; and during its continuance, there is sometimes fever, with a quick pulse, and a hot and dry skin; but all these symptoms disappear with the paroxysm. Sometimes there is pain in a particular spot of the head, termed *Clavis Hystericus*, which increases and decreases with the systole and diastole of the heart. Between the regular paroxysms, the system becomes very irritable; and sometimes there is the irritability of the system only, without the actual paroxysm. There may be other great pain, with convulsions in different parts of the body; cold shiverings, palpitation of the heart, frightful dreams and imaginations, which distress the patient. After the fit has gone off, there is pain in the head, and general soreness over the whole body.

*Diagnosis.*—This disease has been sometimes confounded with hypochondriasis; but it may be distinguished by hypochondriasis arising in men, and hysteria in women; and these diseases also attack persons at different periods of life. Hysteria occurs at puberty, or the

middle period, and hypochondriasis towards the advanced period of life. When hysteria comes on after puberty, it is sudden and violent, but soon declines; and hypochondriasis always increases as age advances. Hysteria cannot be confounded with syncope, as, during an hysterical paroxysm, the heart still continues to beat; and it may be distinguished from epilepsy by the alternate laughing and crying. Sometimes, however, an hysterical paroxysm will resemble epilepsy so accurately, as only to be distinguished by its history.

*Prognosis.*—This disease frequently occurs in a very frightful form, so as to seem to threaten the life of the patient. It is never fatal but in those cases where it induces, or brings on, other diseases, as mania, epilepsy, paralysis, tetanus, &c.

*Causes.*—The causes of this disease are divided into remote and proximate, and the remote causes into predisposing and exciting; the predisposing cause is supposed to be a morbid irritability of the nervous system of the arteries. It is said by some to be confined to women, and generally to occur after puberty; and after it has occurred once, it is liable to recur, but has a tendency to diminish as age advances, and seldom occurs beyond the age of 35 years. It generally begins at 25 years; it may go on to extend beyond 35. It frequently comes on at the time of menstruation, and many females have it then and at no other period. A sanguine and plethoric habit in young persons favours its occurrence, and a single life also. In married persons, it is more common where there are no children; and it sometimes, though rarely, happens during pregnancy. General constitutional irritability of the nervous system, extreme anxiety in those afflicted with this disease, and previous attacks will also predispose to future ones. The exciting causes are grief, joy, fear, surprise, and if the person is predisposed to it, the sight of a person in a fit; menorrhagia, leucorrhoea, affections of the stomach and intestinal canal, and any sudden causes of debility.

*Treatment.*—The causes producing the disease should be removed, and the fit or paroxysm should be relieved whilst it exists. After it is over, bleeding is sometimes effectual, but not in every case. Where, however, there are evident marks of plethora, bleeding is useful, as it not only relieves the vascular system, but at the same time prevents any important changes occurring in the brain. If this treatment be pursued, epilepsy will be less likely to occur; but bleeding should never be employed where there are any marks of debility. In order to rouse the patient during the fit, stimuli, (as the ammoniac carbonas) may be applied to the nose, and the temples rubbed with æther, &c.; cold water may be dashed on the face or extremities. Opium is the grand remedy to shorten the duration of the fit. Just before you know that the paroxysm is coming on, ℥i. of spirit. ammon. may be given in camphor mixture; opium should not be given where plethora

prevails; there, bloodletting is more useful. Æther, opium, castor, valerian, assafœtida, may be given; and tinct. valerianæ ammon. ℥i. Tinct. opii, gr. x. to xv. may be taken when the patient can swallow.

When the fit has passed, the primæ viæ should be evacuated, and the vascular irritation kept off by decreasing the ingesta, and increasing the excreta. Where there is debility, chalybeates, combined with antispasmodics, may be given: cold bathing, the shower bath, and sometimes the warm bath are useful. Pil. ferri with myrrha gr. v. ter in die, as a tonic, may be given; or castor gr. v. ter in die, or pulvis valerian, gr. v. ter in die. The mind of the patient should be calmed, and all gloomy apprehensions chased away by some active employment. Where any spasm exists after the fit, the tinct. assafœtidæ, or the pilul. galban. comp. may be given, and the warm bath used. If the exciting cause should be in defective menstruation, the proper remedies must then be resorted to, according to the indications of cure and the habit and temperament of the patient. The zinci sulphas is sometimes given as a tonic with advantage.

#### THE PLAGUE OF 1665 NOT CONTAGIOUS.

AMONG the manuscripts of Sir Hans Sloane, preserved in the British Museum, is one entitled "An Experimental Relation of the Plague, principally as it appeared in 1665, by William Boghurst, Apothecary, in St. Giles's in the Fields."—*MS. Sloan.* 349. It is a thin quarto volume, and was intended for publication by its author as a general treatise on the disease. It contains numerous particulars, however, which, at a moment when an epidemic is depopulating some parts of Europe, may have an interest, more especially as it details facts which fell under the personal notice of the writer. De Foe's History of the Plague, published in 1772, as most readers are aware, was a pure fiction, though quoted as wonderful authority by the modern contagionists.

Speaking of the "evil signs or presages of the plague," the writer says, "Among these were spots of different colours, hicough, vomiting, carbuncles, or buboes, shortness of breath, stoppage of urine, drowsiness and thirstiness, contraction of the jaws, and large and extended tumours. Although, all that caught the disease with fear, died with tokens in two or three days. About the beginning, most men got the disease with fuddling, surfeiting, over-heating themselves, and disorderly living.

"Tokens appeared not much till about the middle of June, and carbuncles not till the latter end of July, but were very rife in the fall about September and October, and seized most on old people, adult choleric and melancholy people, and generally on dry and lean bodies.



"If very hot weather followed a shower of rain, the disease increased.

"Those that married in the heat of this disease (if they had not had it before) almost all fell into it in a week or fortnight after it, both in city and country, of which most died, especially the men.

"Black men, of thin and lean constitutions, were heavy laden with this disease, and died, all that I saw, in two or three days. People of the best complexions and merry dispositions had least of the disease, and, if they had it, fared the best under it. Strength of constitution was no safety. Death made the strongest assault upon strong bodies. All that I saw, that were let blood in the disease, if they had been sick two, three, four, five days, or more, died the same day. More of the good died than of the bad; more men than women; and more of dull complexion than fair.

"In the summer before the plague, in 1664, there was such a multitude of flies, that they lined the insides of houses; and if any thread or string did hang down in any place, it was presently thick set with flies, like a rope of onions, and swarms of ants covered the highways, that you might have taken a handful at a time. Also, the small-pox was so rife in our parish, that betwixt the church and the pound in St. Giles's, which is not above six score paces, above forty families had the small-pox.

"The plague was ushered in with seven months' dry weather and westerly winds.

"The plague put itself in St. Giles's, St. Clement's, St. Paul's, Covent-garden, and St. Martin's, these three or four years, as I have been informed by the people themselves, who had it in their houses in these parishes.

"The plague fell first upon the highest grounds, for our parish is the highest ground about London, and the best air, yet was first infected. Highgate, Hampstead, and Acton, also, shared in it.

"Many people, after a violent sweat, or taking a strong cordial, presently had the tokens come out; so that every nurse could say, cochineal was a fine thing to bring out the tokens.

"Those that died of the plague, died a very easy death generally:—first, because it was speedy; secondly, because they died without convulsions. They did but of a sudden fetch their breath a little thick and short, and were presently gone. So that I have heard some say, 'how much am I bound to God, who takes me away by such an easy death!'

"One friend growing melancholy for another was one main cause of its going through a family, especially when they were shut up, which bred a sad apprehension and consternation on their spirits.

"Many women giving suck freed themselves of the plague by their children sucking it from them; but some continued well some days, sometimes weeks, and then fell into the disease after their children were dead.

"The wind blowing westward so long together from before Christmas until July, about seven months, was the cause the plague begun first

at the west-end of the city, as at St. Giles's, and St. Martin's, Westminster. Afterwards it gradually insinuated and crept down Holborn and the Strand, and then into the city, and at last to the east-end of the suburbs; so that it was half a year at the west-end of the city before the east-end and Stepney were infected, which was about the middle of July. Southwark, being the south suburb, was infected almost as soon as the west-end.

"The disease spread not altogether by contagion at first, nor began at only one place, and spread further and further, as an eating, spreading sore doth all over the body, but fell upon several places of the city and suburbs like rain even at the first, as St. Giles's, St. Martin's, Chancery Lane, Southwark, Houndsditch, and some places within the city, as at Procter's Houses."

At page 26, the author states himself to have been bold and courageous in the exercise of his profession during the plague. He says, he rendered himself familiar with the disease, knowing that to do good he must be neither nice nor fearful. He says he dressed forty sores a day: and held the pulses of some patients sweating in the bed half a quarter of an hour together, to give judgment, and inform himself of variations. He let blood, gave gylsters, though but to few, held them up in their beds, to keep them from strangling and choking half an hour together; commonly suffered their breathing in his face several times when they were dying; ate and drank with them; sat down by their bed-sides, and upon their beds, discoursing with them an hour together when he had time, and stayed by them to see them die, and the manner of their death, and closed up their mouths and eyes; "then," he adds, "if people had nobody to help them (for help was scarce at such a time and place), I helped to lay them forth out of the bed, and afterwards into the coffin, and, last of all, accompanied them to the grave."

At page 86, he says, "Old people that had the disease, many of them were not sick at all; but they that were sick almost all died. I had one patient four-score and six years old."

"Of all the common hackney prostitutes of Lutener's Lane, Dog Yard, Cross Lane, Baldwin's Garden, and other places, the common criers of oranges, oysters, fruit, &c.; all the impudent, drunken, drabbing bayles and fellows, and many others of the rouge route, there are but few missing.

"Authors speak of several kinds of plagues, which took only children, others maids, others young people under thirty: but this of ours took all sorts, yet it fell not very thick upon old people till about the middle or slack of the disease, and most in the decrease and declining of the disease.

"Cats, dogs, oxen, horses, sheep, hogs, conies, all wildbeasts, hens, geese, pigeons, turkeys, &c., and all wild-fowl, were free from infection.

"Great doubting and disputing there is in the world," says this author, "whether the plague

be infectious or catching or not; because some think if it were infectious, it would infect all; as the fire heats, and heats all it comes near; but the plague leaves as many as it takes: thus are they gravell'd at such arguments, and cannot solve their doubts: and Van Helmont thinks all people catch it by fear: and generally every one is apt to judge by his experience: for if they have been in never so little dangers, and yet have escaped without catching it, they presently think the disease not infectious; and if any one may draw his conclusion from this, I have as much reason almost as any to think it is not infectious, having passed through a multitude of continual dangers *cum summo vita periculo*, being employed all day till ten o'clock at night, out of one house into another, dressing sores, and being always in the breath and sweat of patients, without catching the disease of any, through God's protection; and so did many nurses who were in the like danger; yet I count it to be the most subtle infectious disease of any, and that all catch it not by fear neither, (though this doeth much, as Helmont thinks,) for then children and confident people would not have the disease; but we see many also have it, and children especially, most of any."

A general flux, with vomiting and griping, followed next summer after the plague, Anno 1666. The flux seized on all sorts of people.

FRENCH POPULAR INSTRUCTIONS  
FOR THE  
TREATMENT OF CHOLERA.  
(From our Special Correspondent.)

*Popular directions on the principal measures to be employed as preventives of the Cholera, and on the conduct to be pursued when this disease appears. Drawn up at the command of the French Government.*

THE cholera is a dangerous disease; nevertheless it is more frightening when it is expected than it is dangerous when it exists. Other epidemic diseases, such as small-pox, scarlatina, certain nervous fevers, have made greater ravages than the cholera, since in those parts of Europe where it has shown itself, and where there are the greater number of circumstances favourable to its propagation, it has scarcely attacked one individual in 75, and, in some towns, even scarcely one in 200 have been seized.

*Conduct to be pursued as preventive to Cholera.*

1st. The little danger that any one runs of being attacked by the cholera, ought to reassure all minds. It is necessary not to be alarmed, and to think no further of the disease than by taking proper precautions against it: the less fear, the less danger; but as tranquillity of mind is a great preventive, all that can excite the passions, such as anger, fear, too lively pleasures, &c., should be avoided.

2dly. It has been observed, that the purer the air is that is breathed, the less is the exposure to cholera.

Too much attention, therefore, cannot be paid to the healthiness of habitations. Thus care should be had that too many should not dress, and still less sleep, in the same room; to have it well aired in the morning, and again in the day, by opening the doors and windows frequently. It will also be advisable to place a large vessel, containing a solution of the chlorurets, in the rooms that are occupied. The renewal of the air may be favoured by making a very clear and flaming fire in the chimney for a short time.

It must be especially remembered, that the opening of the doors and windows must not take place before the individual is fully dressed, in order to avoid catching cold. It would be better, when it can be done, to go into another room while this is being done.

Beds without curtains should be used, and the urine and fecal matters should never be allowed to remain in the night-vessels; they ought to be cleaned as soon as they are dirtied, and should always have a little water in them.

The humid air of habitations, unhealthy at all times, is particularly dangerous when the cholera is prevalent. Linen, therefore, should not be dried in an inhabited room, especially if it is slept in. Not only bed-rooms should be well-aired, but the houses should be kept as healthy as possible. Thus it is necessary to pay very great attention to the state of the leads and water-closets, which should be cleansed at least once a day with the chloruret solution, or with water; these places should be kept constantly covered, except when about to be used. The water used in the house should be thrown away as soon as done with, and if the declivity in the street is not sufficient to carry it away, a quantity of water should be thrown with it, to assist in carrying it away. The windows should be cleaned once a week, at least; for the action of light is advantageous to the health of man. The accumulation of dunghills, excrements, decomposing animal and vegetable matter, should be prevented, and such matter removed as frequently as possible. Useless domestic animals should be dismissed. Pigs, rabbits, hens, pigeons, &c., ought not to be kept in close and ill-ventilated places.

The inhabitants of houses, especially in populous quarters, ought to watch each other mutually in this respect; they ought, besides, each in part to contribute towards cleaning the streets, especially when they are narrow: it is the interest of all.

3rdly. Exposure to cold is considered by those physicians who have seen the disease, as one of the causes the most favourable to the superintention of cholera; it is, therefore, necessary to be avoided by warm clothing, and especially guarding the abdomen and feet from the action of cold; it would be advisable, therefore, to wear a flannel girdle, a flannel

waistcoat, and woollen stockings. These clothes should be changed and washed when wet or dirty; the feet should be often washed with hot water; galoshes should be worn when in the cold; in a word, exposure to cold and humidity should be carefully guarded against. Many persons, especially among the poorer classes, have a very bad habit, on going to bed and rising, of placing the naked feet on the cold ground, and even walking. This custom cannot be too much blamed, and it becomes particularly dangerous during the prevalence of cholera. The windows should not be kept open during the hours of rest. A temperate heat should be kept up in the room, but too high a temperature renders those who live in it more liable to be affected by the cold when they go out. For this reason, it is necessary to avoid being out at night, or passing part of it in walking, at assemblies, in coffee-houses, public-houses, &c., especially if the night be cold or wet.

4thly. Leading an active life, avoiding as much as possible great fatigue, is an excellent measure to prevent inquietude. Those occupations which require great exertion of the mind, or an unaccustomed deprivation of sleep, are improper.

5thly. The utility of girdles and woollen stockings have been already mentioned, but they must be kept clean; cleanliness is always very necessary to health. Those who can take warm-baths from time to time should do so, but only remain in a sufficient time to clean the body; great care should be had to dry ourselves well with warm linen, and not to expose ourselves to the cold air immediately on leaving the bath. This precaution is especially useful in cold weather. Dry friction is very useful; it should be practised at night, or night and morning, on the body, arms, thighs, and legs, with a soft brush, or a piece of flannel. The nature of the clothing will depend on the season, but it must never be too light.

6thly. When the cholera is prevalent, it is very important to attend to the description of food taken. Sobriety cannot be too much recommended. A great number of cases have happened in which cholera has declared itself after excesses at table; and it is well known that drunkards are particularly subject to this disease. Roast meat, well cooked, and not too fat, and fresh fish of easy digestion, eggs, bread duly fermented (*bien levè*) and well baked, should form the chief nourishment. Salt meats and fish are not proper; heavy and fat pastry should be avoided, and likewise *la charcuterie*. Among vegetables, the lighter and least aqueous\* should be preferred. Potatoes of a good quality may be used; haricot beans, peas,

lentils with their skin off\*, may be taken. Those taken raw, such as salads, radishes, &c., are not proper. In the season of fruits, great precautions are necessary, especially if they are not quite ripe, as they may then become very dangerous. Fruits, when cooked, are less injurious, but they ought never to be taken in great quantity; still less ought they to form the great part of a meal. There are certain kinds of food generally healthy, but which, by a peculiar disposition of the stomach in some persons, are with difficulty digested; these, therefore, should be avoided. It is better, during the presence of cholera, to eat less at a time, and to make an additional meal. The drink requires no less attention: cold drink, taken when the body is hot, is dangerous; it should not be taken until perspiration has ceased; the consequences are more injurious the colder the liquid, and the more the individual is heated. The water ought to be clear; when filtered, it is preferable to all others. A little vinegar or brandy, (two spoonfuls of the latter or one of the former), may be added, especially if the weather is hot, and the individual is obliged to perform corporeal labour, which, by exciting perspiration, causes thirst, and he consequently requires to drink frequently. He should, in that case, take little at a time. Water, with a little good wine, is equally proper. Water made aromatic with a stimulant infusion, as that of peppermint or camomile, (a pinch of the mint, or six camomile flowers, to a pint of boiling water, to which, when it has cooled, may be added a pint of cold water†), may also be used advantageously.

Nothing is more pernicious than the abuse of strong liquors. It has been proved, by a great number of examples, that the cholera attacks in preference, as has been already said, drunkards, and even those who, without habitually abusing strong liquors, commit a single excess of that kind occasionally. The use of brandy taken pure and fasting, a custom so common among the working classes, and so injurious at all times, is especially hurtful during the prevalence of cholera. Those persons who have this habit should eat something, at least a bit of bread, before swallowing the brandy. White wine should never be taken fasting, without the same precaution; and it should be in small quantities. In times of cholera, bitter brandy,—that is to say, brandy in which bitter or aromatic plants have been infused, or *l'eau-de-vie d'absynthe*, is preferable to common brandy. Wine, taken in moderate quantity, is a proper drink during and at the end of a repast, but it ought to be good. It is better to drink less wine, and have it of a superior qua-

\* The pellicle of these dry or green vegetables does not contribute anything to nutrition, and it is not digestible.

† It is necessary to add water which has not boiled, because ebullition deprives it of its air, and renders it less easy of digestion.

\* By watery vegetables, is meant those which contain a great quantity of water of vegetation, as, for example, cucumbers, beet-root, lettuce, &c.

lity. New and acid wines are more hurtful than useful. The red wine is preferable to the white. Those who have it in their power to mix it with a water impregnated with gas, such as the natural or factitious Seltz water, would do well to use this salubrious and agreeable drink. Beer and cider, especially when they are too new, when they have not been well fermented, or when they are acid, dispose to colics and diarrhoea, and thus become very dangerous. This applies also to mild or mulled wine.

*Conduct to be pursued when the Cholera attacks an individual.*

It is evident, from a great number of facts observed in places where the cholera has reigned, that the cases of cure are in relation to the promptitude with which assistance is afforded. It is therefore necessary that every one should be acquainted with the first signs that indicate that an individual will be, or is actually attacked with cholera. These signs, which generally show themselves in the night or in the morning, are as follow :—

Sudden lassitude or feeling of fatigue in all the limbs; feeling of weight in the head, as after exposure to the vapour of charcoal; vertigo; giddiness; slight deafness; often a leaden or bluish paleness of the face, with a peculiar alteration of the features; the look has something extraordinary, and the eyes lose their brilliancy; diminished appetite; thirst, and desire to relieve it by cold drinks; feeling of oppression and anxiety about the chest, and of heat and a burning sensation at the pit of the stomach; transitory flying pains under the false ribs,—that is to say, under the ribs from the hollow of the stomach, reckoning from above downwards; borborygmi (rumblings) in the intestines, accompanied especially with colic, to which succeeds diarrhoea, or purging. This seems sometimes to diminish the pain; the skin becomes cold and dry; sometimes a cold perspiration breaks out. Some patients have shivering down the spine of the back, and a sensation among the hair as if cold air was blown on it. These various signs of the invasion of the disease do not always present themselves in the order in which they have been traced, neither are all present in every case. However that may be, when several of them, especially the alteration of the features, commencing deafness, lassitude, sensation of burning heat at the pit of the stomach, borborygmi, coldness of the surface of the body, are present, a medical man should be immediately summoned.

*Measures to be employed before a Medical Man arrives.*

The skin should be strongly excited, and heat recalled to it. With this view, the patient should be placed naked between two blankets previously warmed, and hot irons or bed-pans should be passed over the whole surface of the

body over the blankets. The irons should be kept longer over the pit of the stomach, in the arm-pits, over the heart, and especially under the feet. Friction should be applied strongly and for a long while to the limbs with a dry brush or an irritant liniment, using a piece of woollen cloth or flannel. This should be done as much as possible by two persons, each rubbing half the body at the same time, taking care to uncover the patient as little as possible.

The liniment, the formula of which is as follows, according to various statements, appears to have been used with great success

Take of	Brandy . . .	one pint,
	Strong vinegar .	half a pint,
	Flour of mustard	half an ounce,
	Camphor . . .	two drachms,
	Pepper . . .	two drachms,
	A clove of peeled garlic.	

Put the whole in a well-corked flask, and let it infuse for three days in the sun, or in a warm place. Friction should be continued for a long while, and the patient should remain lying down, wrapped up in flannel. Hot sinapisms may also be applied on the back and abdomen, or very hot linseed poultices, sprinkled over with the oil of turpentine. Advantage has been drawn from the application of small bags, filled with hot ashes or hot sand, on the body. Experience has proved, in many places where the cholera prevailed, that baths of vinegar, or vinegar and camphor vapour, were of great utility. Thus, while endeavours are made to warm the patient by the use of the hot irons and friction, a vapour-bath may be prepared in the following manner :—Stones, or pieces of brick or iron, are to be made red-hot; then earthen vessels containing vinegar, to which some recommend camphor to be added (two drachms of camphor, dissolved in a sufficient quantity of spirits of wine, to a quart of vinegar) is to be placed under an arm-chair, or one made of cane. This being done, the patient is made to sit down on the chair undressed, and covered, with the exception of the head, with blankets which descend to the feet, and surround the chair: the feet should be placed on flannel or some other warm substance. The stones or bits of brick or iron are then to be thrown into the vinegar, one after the other, at intervals of a few seconds; the vinegar by this means becomes heated, and is soon reduced to vapour. This bath ought to continue ten or fifteen minutes. When the patient leaves it, he ought to remain lying down between very dry and warm blankets, and left quiet, if a moderate perspiration breaks out. In the contrary case, the frictions should be continued, always under the coverings, until the arrival of the medical man.

But it is not sufficient to warm the body externally, it must be warmed internally. With this view, half a cupful of very hot aromatic in-

fusion (one made with peppermint or melissa, prepared like tea) may be given every quarter of an hour; and every half hour, immediately before the infusion, twelve or fifteen drops of aniseed and camphorated ammoniacal solution\* in a tea-spoonful of gum-water (with a little water or syrup of gum). Happy effects have also been obtained, in many places, from the liquid volatile alkali, given in doses of fifteen or twenty drops every half hour or hour, in a cup of strong hot decoction of the pearl-barley, or, if that cannot be obtained, of hot water. This, however, ought never to be given more than twice before the arrival of the physician. If these things cannot be obtained, pure water as hot as possible, and taken a little at a time, may be given with advantage.

Although these different measures should be employed as soon as possible, they should nevertheless be administered with order and without precipitation. It will be advisable, as often as it can be done, to place the patient in a room apart from those occupied by the rest of the family. It will be as well also to throw the clothes of the patient in very hot soap-suds.

Convalescence requires precautions which the medical man must point out. Nevertheless, convalescents cannot be too strongly recommended to adhere rigidly to the rules of preservation already detailed, for those who have been attacked by cholera are sometimes liable to a relapse.

It becomes our duty to conclude these instructions, by earnestly recommending the public to place no faith in the measures said to be preservative and curative, the properties of which avaricious quacks have puffed in the journals, or which they announce by bills placarded against the walls of the capital. If any remedy of that nature were known, it would soon be rendered public, and recommended by authority.

(Signed)

JUGE, PARISET, ESQUIROL, CHEVALLIER, LEROUX, LEGRAND, DESGENETTES.—MARC, Reporter.

*The President of the Central Board,*

(Signed) LE DUC DE CHOISEUL.

PETIT, Secretary.

Approved,

(Signed) GISQUET, *Préfét de Police.*

\* Take of

Alcohol . . . . .	twelve ounces,
Liquid ammonia at 18° . . . . .	three ounces,
Essential oil of aniseed . . . . .	half an ounce,
Camphor . . . . .	drachm & a half.

Keep it in a sealed flask.

THE

SPIRIT OF MEDICAL LITERATURE.

No. 6.

*Consolidation of Fractures during Pregnancy.*

It has been said, that fractures will not unite in pregnant women; that they remain ununited until the period of utero-gestation is at an end, and that then the fracture becomes consolidated by osseous union. It is not common to meet with fractures in pregnant females; so that, perhaps, one cannot say from experience what is the fact. In many instances, however, it may be safely stated, that fractures in pregnant women have united just as they have been repaired in females under other circumstances; so that I doubt altogether, for my own part, the accuracy of that common notion. I have never seen an instance of fracture occurring in a pregnant woman where bone has remained ununited.—LAWRENCE.

*Pay of an Army Surgeon in the reign of Henry the Fifth.*

The field surgeon of Henry the Fifth of England (Nicholas Colnet) received a yearly sum of forty marks, in addition to his share of plunder; but Nicholas had to furnish three archers, and, if his booty exceeded twenty pounds, he was to give up one-third to his majesty.—HENNEN.

*Pay of Army Surgeons in the reign of Queen Elizabeth.*

Every captain of 100 footmen doth receive weekly, upon every Saturday, his full entertainment of twenty-eight shillings; in like case, every lieutenant fourteen, and ensign seven; our sergeant, surgeon, drum, and fife, five shillings pay, by way of imprest; and every common soldier three shillings, delivered to all by the poll, weekly. To the four last lower officers two shillings weekly, and for every common soldier, twenty pence weekly is

to be answered, to the full value thereof, in good apparel of different kinds.—*IBIDEM.*

*Infrequency of Hydrophobia.—Singular Statement.*

In eighty years' practice, that is, from the time of my father beginning until now, May 20th, 1830, (in which period we have probably seen among us 400,000 sick persons), seven cases only have fallen under the observation of my father, my brothers, and myself, and of these we had only one each under our own immediate care. In the Birmingham Hospital, established fifty years, 112,725 patients have been admitted, and among them there has been only one case of hydrophobia. On these data, the average occurrence of hydrophobia is one in 120,000 cases.—*DR. JOHN JOHNSTONE.*

*Effects of Alum.*

Very large doses of alum, even two ounces of it, may be given to dogs without producing any effect but vomiting and purging; after a few hours, the animals appear to be perfectly well. If a ligature is applied to the œsophagus subsequent to the administration of it, so that the alum cannot be rejected, death ensues within a few hours.

The external application of an ounce of alum, between the skin and muscles, produces a deep gangrenous ulcer, with profuse suppuration, and death within fifteen or twenty days. It is more than probable that an adult may take a very large quantity of alum, amounting perhaps to some ounces; without any decidedly injurious effect.—*ORFILA.*

*Dr. Biessy's Treatment of Inverted Nails.*

Dr. Biessy, of Lyons, scrapes with a bistoury the healthy portion of the nail, till it is reduced to an exceedingly thin layer, which is then repeatedly touched with nitrate of silver, till the anterior portion shrivels up and separates spontaneously from the flesh beneath; small pieces of lint are

then placed between the nail and the flesh, till the new nail has become sufficiently large, which is generally the case within twenty or thirty-five days after the operation.

*Use of Tobacco in Spasmodic Asthma.*

In spasmodic asthma the tobacco has been productive of the greatest advantage, when given in small doses every five or ten minutes, until the patients have become affected by it with faintness, vomiting, and free evacuation of the bowels; relief from the "embarrassment," followed by free expectoration, has been the almost invariable effect in these cases.

*Preparation of the Chloride of Gold and Soda.*

Dissolve ninety-six grains of pure gold in nitro-muriatic acid; evaporate and crystallize; dissolve the crystals of the chloride of gold obtained, in pure water, and thirty grains of precipitated chloride of soda. Evaporate the solution and crystallize. This salt is slightly deliquescent, and must, therefore, be kept in a stoppered phial.—*FORSTER.*

*Climate or Season not the Cause of Fever.*

To climate or season being a cause of fever, the answer is given in the facts, that each epidemic has raged through heat and cold, through summer and winter, spring and autumn. The vulgar opinion, that cold has power in checking epidemic fever, is totally without foundation. In the two last visitations, of 1817-1818 and 1826-1827, the epidemics were at their height in the middle of winter, and began to decline in warm weather.—*DR. CORRIGAN.*

*Cause of Epidemic Fever in Ireland.*

Epidemic fever in Ireland cannot depend on climate or season, for I have shown that it has raged unchanged through every variation, through heat and through cold, through wet and through drought; it cannot depend on changes in the condition of

the poor, as regards cleanliness, ventilation, or temperance, for their habits in these respects never vary much; it cannot depend on contagion, for contagion must first have been generated by fever, or being once generated must have never ceased to spread, until it perished from a want of subjects.

Epidemic fever may be attributed to a mysterious something, an occult quality in the atmosphere; but it would be bad philosophy to pass by a visible and palpable cause, and ascribe an occurrence to an agent, of the very existence of which we have no proof. We find famine invariably preceding or accompanying epidemic fever, (it matters not how other circumstances vary), and famine, therefore, we are justified in marking out as its grand cause.—*IBIDEM.*

#### *Salubrity dependent on Industry.*

It is only by constant efforts of industry that the salubrity of any spot is maintained: when these are relaxed, or when prosperity and civilization decline, the seeds of disease are immediately deposited in the earth. The aguish disposition has been observed to increase in Rome, in the same proportion that its population has diminished. On the other hand, it is well known, that the climate of the United States has been remarkably improved by draining, cutting down trees, and the operations of agriculture; and that spots which were uninhabitable, or fatal to the early settlers, at present afford a comfortable residence.—*DR. B. HAWKINS.*

#### *On Iodine.*

Respecting the use of iodine, the good effects which have followed its administration in cases of bronchocele, have led to its use in a variety of other affections, under the idea that it is capable of exciting the action of the absorbents, and so removing disease; thus it has become a fashionable remedy in scrofulous and enlarged glands. Now I cannot say, that I have seen such effects from it in other

cases, as would induce me to repose any particular confidence in it as a general means of reducing those swellings. I think it right, however, to mention to you, that there are circumstances which have led some persons to place more reliance on it, in this respect, than I do myself. I have heard of one, the relation of which may, perhaps, lead you to entertain some opinion of its efficacy; it is this, the ladies in Switzerland will not take the iodine internally, because they think it *reduces the size of their breasts*; if that be really the case, it would seem to be true, that the remedy has some effect in exciting the absorbent vessels.—*LAWRENCE.*

[The most extensive experience has incontrovertibly proved, that iodine is one of the most powerful and valuable medicines ever discovered.—*EDS.*]

#### *Short-sightedness.*

A near-sighted individual cannot see the countenances of persons in a large room, he cannot distinguish the features of players on a stage, he cannot describe pictures in a room; for all these purposes he requires concave glasses. This is a defect of vision found in young persons; perhaps at from fourteen to eighteen years of age they begin to detect it.

Young persons do not like the idea of using glasses, and they want to know whether or not they may safely do so—whether the employment of glasses is likely to assist them permanently. You may say, certainly, in such a case, that they are absolutely necessary for the purpose of vision, that their use is not attended with any injury to the eye, that the employment of glasses is not likely to render the eye worse, or to make vision more imperfect. It is better that a person so circumstanced should use such glasses as will enable him to see objects without any unpleasant effort of the eye; he will do better with assistance of that kind, than by attempting to strain the eye without it. It should be observed, that he ought to use a glass that will just enable

him to see easily and clearly, and not to employ one that will occasion any fatigue to the eye. With a glass of the latter kind he may be enabled to see objects better than with one of more power, but if it produce any uneasiness about the eye, it is a clear proof that the instrument is too powerful, and would certainly injure the sight.—*IBIDEM*.

#### The Judgment.

Judgment is the analysis of the relation between cause and effect,—a balancing of motives, or of things, as it regards the inward man or the external world. All things that are not cognizable to the senses become known to us by their effects; therefore, judgment is a mode of observation. Bacon, Locke, and Condillac, meant by observation, the employment of the faculties with which nature has endowed us, to study the object with which we wish to become acquainted; and in this sense judgment is also as much a faculty of observation as perception. The philosophers of the modern French school say, that the method of observation is given to us by the spirit of the time, which is in itself the work of the spirit of the world. I suspect the determination is meant here, and not the method.—*AINSWORTH*.

#### Effects of Civilization.

Man is, without his will, the constant means of disseminating the germs of life as well as of disease. The progress of the settlers in the plains and forests of America has every where been accompanied by the development of new forms of vegetable life; the plantain was called by the Indians "Englishman's foot," as if it sprang from their footsteps. (*Lyall's Geol.* vol. ii. p. 82.) Ramond observed, that the common nettle was constantly to be found growing in the vicinity of the *châteaux* of the Pyrennees. Dr. Knox told me, that in returning from the interior of South Africa, the places of rest on the advance of the expedition were characterized by their pecu-

liar vegetation. Lichtenstadt, the naturalist, has mentioned some curious facts of this kind; and the geographical distribution of many insects is connected with the same phenomenon.—*IBID*.

#### Non-extension of the Itch.

If the itch be contracted among those who are cleanly, it will be confined, perhaps, to a small part of the body. Where persons are in the habit of changing their linen and cleaning it regularly, it will be limited to a small part, and it does not extend in decent families, where they all attend to cleanliness. I have known several instances of one member of a family having it, without any other persons in the house catching it, who have been in free intercourse with the affected individual. I remember, very well, a clergyman calling on me with two daughters, one of whom, he said, had got a very obstinate affection of the skin; very handsomely-dressed young ladies they were; and I begged to see it. She opened one arm, and showed me a specimen of it. I could not help supposing, at once, what was the nature of the complaint. The father said that a great variety of means had been employed to get rid of it; in fact, he said, that some persons had thought it was the itch, and they had used a great many remedies with a view of curing it, but they had not succeeded in doing so. I said, that in my opinion it was the itch, and that I could not entertain a doubt that if a certain kind of treatment were adopted, the lady would get perfectly well. He said it was impossible it could be the itch, for she had been in the habit of sleeping with her sister during the whole of the time she had been ill, which was then nearly a year, and that she had not affected her sister with it. I said, however, that I could only recommend a certain course of treatment, and if that did not do, some other means should be tried. This was put in practice, and accordingly the result was, that the complaint was speedily cured.—*LAWRENCE*.



*Hæmorrhage.*

It is to be remembered, however, that hæmorrhage may occur, both from the stomach and intestines, which may demand astringents, from the great amount of the discharge, the absence of inflammatory symptoms, and the debility of the patient, as these are parts to which astringents can be directly applied, exactly as to the external surface. All astringents are useful; but one of the most effectual medicines is the oil of turpentine, exhibited not in large but small doses, as from ten to thirty drops every four, six, or eight hours. Its utility in passive epistaxis, applied with lint up the nostrils, and in hæmorrhage from ulcers and sloughing parts, is well known to surgeons. With the exception of turpentine and superacetate of lead, I may state, that I altogether doubt the utility of all astringents given internally in any hæmorrhages except those of the alimentary canal, to which, as I have just said, they may be applied, not by means of absorption, but directly.—ELLIOTSON.

*Periodicals a Cause of Suicide.*

There is another and still more influential cause, though unnoticed, of the increase of suicide, and that is, the rapid and immense increase of periodical journals. There are few persons now, comparatively, in this country who cannot read; and the means of so doing is amply supplied by a teeming and cheap press. As the eagerness for this species of gratification has augmented, the public taste has become more vitiated and debased; and hence nothing is found so attractive as tales of horror and of wonder.—DR. GEO. MAN BURROWS.

*Travelling Œdema.*

In œdematous inflammation, the part or habit is unhealthy and debilitated. Hence, while there is necessarily less tendency to suppuration, there is less power of recovery. In some instances the disorder is migratory, of which the following singular case occurred. The patient was a ro-

bust sanguineous man, of fifty-five years of age, who had for many years laboured under paroxysms of gout, which had returned after certain intervals, but who, at the time, had been free from attack for a longer term than usual. The œdema first suddenly showed itself in the eyelids, and disappeared on the second day, when he complained of pain and swelling in the fauces, with difficult deglutition. Some months afterwards the same erythema returned, travelled in the same direction, and at last fixed on the feet, which, in like manner, inflamed, ulcerated, and healed, with a speedy return of general salubrity.—SWEDIAUR—MASON GOOD.

*Protraction of vegetable Life.*

A bulbous root, which was found in the hand of an Egyptian mummy, and in which situation it had probably been for more than two thousand years, germinated on exposure to the atmosphere, though, when discovered, it was apparently in a state of perfect dryness. The root was subsequently put into the ground, where it grew with readiness and vigour.—Houlton.

*Change of Climate.*

Too much is generally expected from the simple change of climate. From the moment the invalid has decided upon making such a change, his hopes are often solely fixed upon it, while other circumstances not less conducive or necessary to his recovery are considered of secondary importance, and are sometimes totally neglected. Nor is this fault always confined to the patient: his medical adviser frequently falls into the same error, and it is not difficult to account for this. The cases hitherto sent abroad have been, for the most part, consumptive or chronic diseases of long standing, in which the ordinary resources of our art have been usually exerted in vain, before such a measure is recommended. Therefore, when change of climate is determined upon, the physician as well as the patient

is disposed to look upon it as the sole remedy. The former generally advises all medicines to be laid aside except such as are requisite to keep the bowels regular; and with this counsel he leaves the patient to his fate, encouraging him to place his confidence in change of air, of scene, &c., and in these alone.

Such, generally speaking, is the sum of medical advice with which I have found most invalids sent abroad. And as I have witnessed, on a pretty extensive scale, the injury arising from this kind of over-confidence in the unaided effects of climate, and the consequent neglect of other things of no less importance, I particularly request the attention of invalids (and I hope I may be allowed to add, of physicians) to the following remarks:—

In the first place, I would strongly advise every person who goes abroad for the recovery of his health, whatever may be his disease, or to whatever climate he may go, to consider the change as merely placing him in a situation the most favourable for the removal of his disease; and to bear constantly in mind, that the beneficial influence of travelling, of sailing, and of climate, requires to be aided by such a regimen and mode of living, and by such remedial measures, as would have been requisite in his case, had he remained in his own country. All the circumstances requiring attention from the invalid at home, require to be equally attended to when he is abroad. The necessity for such attention may differ somewhat in degree,—but that is all. The same care as to exercise, regimen, &c., that would have been necessary at home, will be equally so abroad. If in some things greater latitude may be permitted, others will demand even a more rigid attention. It is, in truth, only by a due regard to all these circumstances that the powers of the constitution can be enabled to remove, or even materially alleviate, a disease of long standing, even in the best possible climate. — DR. JAMES CLARK.

VOL. II.

### *Dropsy attendant on Diseases of the Chest.*

In cases of dropsy succeeding winter cough, chronic bronchitis, and asthma, there is, for the most part, more or less of disease in the heart and its membranes,—as general dilatation of the cavities of the heart, ossification of the valves, thickened pericardium, and effusion either of a sero-purulent, sero-sanguinolent, or serous nature, into the sac of the pericardium.—DR. HASTINGS.

## AUTOBIOGRAPHY

OF AN

### ARMY MEDICAL OFFICER.

IN undertaking a series of communications which will, probably, be entitled to the distinction of *Memoirs*, or *Reminiscences*, the writer imitates an example which has, in numerous instances, been adopted with success. His object is not of any mercenary, much less of an interested nature. He expects to refresh the memory of the *veteran*, and hopes to excite the laudable emulation of the *juvenile medical*—he would add the word *man*, but for the circumstance of his never having met with a medical *woman*.

He has seen MUCH, both medical and general; but he has always looked upon events with a *medical*, if not a *philosophic eye*. The scenes which he has had the opportunity of beholding will, in all probability, never again be presented to mortal scrutiny. The times in which he acted are past; but what is HISTORY? We live *after* our predecessors, but do we owe them *nothing*? Did *Cæsar*, and *Horace*, and *Virgil*, and *Hippocrates*, and *Galen*, and *Celsus*, and *Rhases*, and *Albucasis*, and *Avenzoar*, and *Harvey*, and *Sydenham*, and *Monro*, and *Cullen*, and *Hunter*, and *Gregory* (though last, by no means least)—all of whom are gathered to THEIR fathers—Did these, I say, investigate and communicate the brilliant results of their splendid investigations for no purpose? Shame!

shame upon the somniferous race with which, in the middle of the 19th century, and in the very focus of light, we are compelled to grope in the dark.

I dare inquiry either into my *moral* or my *professional* character; the sequel will prove that, in the latter respect, at least, I am as *invulnerable* as a medical man can be. As regards the former, I take the liberty of thinking for myself, and of so acting;—as well as the fools among mankind will permit me, and these unfortunately far outnumber the wise. I have also done *the state* some service, and *they* know and *acknowledge* it, though the hand which has the benefit knows it, or recognises it, not. I have been a medical editor, too; and the medical world did not despise or neglect my journal. I am, in consequence, perhaps, of all this, now the *subject* of persecution; but I am determined it shall not make me its *victim*. Thanks to the Ruler over all, I possess energy, and can command means sufficient to repel the enemy from the gate.

In 1807, having previously taken the degree of A.M. in the regular way, I repaired to Edinburgh; and, during the first session, studied anatomy and surgery under the *Monros*. The anatomical part of the course was given by the *present* Dr. M.; the surgical (which occupied the last six weeks of the session) was delivered by his father, Dr. *Monro Secundus*; and this was the last course of lectures which this learned and celebrated gentleman ever gave. His last lecture I shall hereafter have occasion to allude to. I also attended, this session, Dr. Hope's course of chemistry. These were considered, by competent judges, to be sufficient occupation for a commencement in medical studies. In the ensuing summer of 1808, I attended Dr. Hamilton, the Professor of Midwifery, &c., and wrote his lectures fairly out. These I have preserved amid the wreck of much literary property; and they have been copied by some of his pupils, who, at the distance of several years from

attending this valuable course of instruction, regretted that they had been less diligent than myself.

I also, this season, began to attend the Royal Infirmary, and had a partiality for the surgeon's ward.

It was almost a splendid sight to see the clinical professor accompanied by two or three hundred men in his visits;—not all youths, be it understood,—many of his followers being men of mature years and understanding,—men of Oxford and Cambridge, graduates in the arts, &c, whose names were yet inscribed on the University boards for the degree of M.D., while they were obtaining their medical knowledge in Auld Reekie; whose *doctors* are unfit for the *fellowship* of our Royal Physicians!! One of my cotemporaries was the late Dr. Richard Harrison; and Dr. Haviland, the able Professor at Cambridge, was another. If I am not mistaken, both these gentlemen graduated before my eyes; but whether my recollection be imperfect or not, this I am sure of, that no two men were more diligent in their attendance upon the lecture, or more respectful towards the Professors, more observant of College rules (though the Edinburgh discipline is almost *vox et nihil præterea*), or more active in advancing the interests of the students, one remarkable instance of which I shall, in my next, relate.

Ομικρον.

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*Further Observations on spontaneous Amputation of the Limbs of the Fœtus in Utero.* By WILLIAM F. MONTGOMERY, M.D., M.R.I.A.

(From the *Dublin Journal of Medical and Chemical Science*.)

“SINCE the publication of some observations on this curious subject, inserted in a former number of this Journal, another example of this extraordinary process has been brought under my inspection, by my friend Dr. John Labatt, one of the assistant physicians

to the Lying-in Hospital of this city, to whose love of scientific investigation, and polite attention, I have to acknowledge myself, on this and many other occasions, much indebted.

"A healthy woman was delivered of a still-born child in the eighth month of utero gestation; the attention of those present was attracted by a tumour attached to the abdomen of the child, which, on examination, was found to be an umbilical hernia of great size, and formed by the protrusion of the liver, stomach, and small intestines, through the umbilical opening into the sheath of the funis, which was distended so as to accommodate them, while the umbilical vessels were a good deal displaced from their natural contiguity to each other, but in other respects observed their usual course and connexions; the opening through which the viscera protruded was of a diameter of about two inches.

"On this part of the description, I propose only to observe, that, had the child lived, however unpromising such a condition of the parts might be, it appears that the result might not be altogether hopeless, since we find recorded a case very nearly similar, in which the intestines were reduced, the sac tied, and the child recovered\*.

"But, to return from this digression to the condition of the lower limbs, both of which present some degree of deformity, and imperfect development. The right leg is curved inwards, so that when the child is held erect, the outer edge of the right foot is the part on which it rests; a particular, in which, I may observe, it resembles the same part in Mr. Watkinson's case; and, as happened in his case also, the left leg is the seat of the remarkable pathological change, and exactly in the same situation: just above the ankle there is a deep depression surrounding the limb, and sinking to such a depth as to leave only the bones and skin un-

affected by it, the diameter of the undivided part being less than half an inch, while that of the leg, just above the depression, is an inch and quarter; the appearance of the groove is exactly such as would be made by tying a string with great force round the plump limb of a child, and indeed is such as, in my opinion, could not be produced by any other means. The woman was attended by a pupil, and the child was very much handled and examined by several before I saw it, so that I was not surprised at not finding any ligature on the limb; but the mark of where it had been was so distinct in the bottom of the depression as to leave no doubt of its previous existence there.

"It is important also to observe, as confirmatory of this view, that the integuments are not at all broken or divided, but carried in with the constricting agent, so that had separation of the limb taken place, each stump would appear skinned over, except at the bones, and so present the appearance of being partially healed, as described by both Watkinson and Chaussier; the foot was a little swollen, and somewhat discoloured; it seemed as if turgid with blood, but was without any appearance whatever of gangrene; the toes were very imperfectly developed.

"Under such circumstances, few, I suppose, will be inclined to doubt the great probability, that, had the child not been prematurely expelled, but arrived at its full term of uterine existence, it would have been found at birth deprived of the lower portion of the limb, as happened in the instances related by the authors already referred to.

"An accurate cast of the whole subject was taken, and another of the affected limb, which, together with the parts themselves, are preserved in my museum."

\* *Bulletin des Sciences Med.* Janvier, 1828, p. 71.

THE

**London Medical & Surgical Journal.***Saturday, October 13, 1832.*

OURSELVES AND OUR CONTEMPORARIES.

WE have lately completed the first volume of this periodical, and challenge a comparison of its contents with those of any journal in existence. In accordance with the spirit of the age, in favour of cheap literature, we commenced this work at two-thirds of the expense of rival publications, though we embarked a large sum in effecting arrangements which afforded us the ablest assistance which this country possessed, and valuable contributions from our foreign contemporaries. Our object was to exhibit a concise yet comprehensive view of the progress of the medical sciences in all countries, and to support, maintain, and protect the rights and interests of every legitimate member of our profession. We determined to act upon the broad principles of truth, honour, and independence, and to do unto others as we would wish they should do unto us. Belonging to no party in the profession, we cannot be influenced by any, and are free to comment upon all. We are among those who think medical reform, in all our corporations, imperiously necessary; and we are the avowed and unflinching advocates of that measure. We also think, that the education required for admission into the profession exceedingly imperfect; and that the expense attending it is ex-

orbitantly extravagant. We therefore befriend the student on every occasion; we expose and denounce the impediments thrown in his way, whether in the form of new and vacillating regulations, enormous fees, or the inattention of his teachers. We afford him the Elements of Medicine on the lowest terms ever offered, and from the most eminent lectures of the day. To those, whose names are placed on the honourable roll of qualified practitioners, we supply a condensed account of the progress and improvements in Practical Medicine, and enable them to obtain the most valuable information. In proof of the truth of our statements, we subjoin the contents of our first and second volumes.

Volume I. contains—1st. Selections from the lectures of Professors Bell, Cooper, Green, Guthrie, Burnett, Elliotson, Good, Smith, Rennie, Faraday, Clendinning, Brodie, Everett, Ryan; of Messrs. Lawrence, Earle, Tyrrell, Aston Key, Morgan, Epps, Hetling, and Sir G. W. Tuthill.

2. A course of clinical surgery, delivered by Baron Dupuytren, on the most important surgical cases which have been observed at the Hôtel Dieu of Paris, during the last Winter, Spring, and Summer, illustrating the original opinions and practice of one of the first surgeons in the world.

3. Sir Charles Bell's views on the physiology of the nervous system, as delivered during the last spring in his lectures at the Royal College of Surgeons in London.

4. Professor Guthrie's course of lectures on the diseases of the eye, delivered last spring at the Royal College of Surgeons; containing his original opinions on the nature and treatment of ophthalmic diseases.

5. Selections from the lectures of Professor Cooper, delivered at the University of London, on disputed points in Surgery; and also those delivered on the same subjects by Professor Green, at the King's College.

6. Professor Elliotson's clinical lectures at St. Thomas's Hospital, Professor Guthrie's at the Westminster Hospital, and Mr. Earle's clinical lectures at St. Bartholomew's Hospital.

7. A selection from the surgical lectures of B. Brodie, Esq., F.R.S., delivered at St. George's Hospital; of William Lawrence, Esq., F.R.S., delivered at St. Bartholomew's Hospital; of C. A. Key, Esq., F.R.S. and John Morgan, Esq., at Guy's Hospital; of F. Tyrrell, Esq., at St. Thomas's Hospital; and John Hetling, Esq., at the Bristol Infirmary.

8. Various lectures delivered by Drs. Sir G. Tuthill, Clendenning, Burrows, Epps, Ryan, &c.

9. Clinical reports from the metropolitan and provincial hospitals.

10. Various original communications from all parts of the kingdom, impartial reviews, and analyses of all the valuable works published during the last six months.

11. Numerous extracts from the European and American medical journals.

12. A critical review of the best works on cholera, and of the debates of the Medical Societies of London on the disease, with exposures on the imbecility, incompetency, and bad policy of the Central Board of Health; and of medical abuses in the colleges, hospitals, dispensaries, &c.

13. A translation of Dr. Harvey's immortal work on the Circulation of the Blood.

14. A digested abridgment, in English, of the celebrated *Dictionnaire de Médecine et Chirurgie Pratiques*, now in course of publication at Paris, edited by the most renowned physicians and surgeons of France, and amounting to 104 pages, which may be detached from the journal,

and form a separate volume of the latest Cyclopædia of French medicine and surgery. (*Gratis*.)

Volume II, just commenced, will contain three complete courses of lectures, now being delivered this session, October, 1832:—

Professor Cooper's Surgical Lectures, delivered at the London University;

Dr. Graves's Lectures on Clinical Medicine, at the Meath Hospital in Dublin, and various other lectures from all the metropolitan and many provincial hospitals;

Baron Dupuytren's Surgical Lectures, at the Hôtel Dieu of Paris; together with occasional lectures on clinical medicine and the practice of physic, by Drs. Elliotson, Roots, Sigmond, and other distinguished lecturers.

Weekly Reports of the Proceedings of the various medical societies, and from all the hospitals in London.

Reviews of all new medical works.

Extracts from the British, French, German, Italian, and American journals; and, lastly, Literary Intelligence.

This Journal is published every Friday, at twelve o'clock, each number containing thirty-six pages, 8vo., in small type, double columns, fully as much as an ordinary half guinea volume. Price 6d.

It is also published in monthly and quarterly parts, and half yearly volumes, and may be had of all booksellers and newsmen, or through the general post offices in London, Edinburgh, and Dublin.

#### MORTALITY FROM CHOLERA, IN PARIS.

THE actual mortality from cholera in Paris to the end of September last, according to the official report just published, is 18,373. One of our contemporaries makes some hundreds more, on the authority of M. de

Jonnés, which, in Paris, is considered no authority whatever. This person gives the deaths in Paris last year, subtracts the deaths since January last, and it is gravely inferred that the remainder is to be ascribed to cholera. He stated, some time ago, that two physicians had died of cholera at Sunderland; to which M. Magendie replied, he had dined with both a month after the reported time of their death. Such is a specimen of the veracity of the contagionists.

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THE GENERAL MEDICAL PRACTITIONERS' SOCIETY OF SOUTH-WARK AND ITS VICINITY.

A numerous and highly respectable meeting of the members of the General Practitioners' Society of South-wark, took place at the Society's Rooms, Chester-place, Borough-road, on Friday the 5th instant, when some excellent laws for their regulation were submitted by the Committee, and adopted by the meeting.

We are happy to state, that this society is formed for the protection of good feeling among medical men, including physicians and consulting surgeons, and every branch of the profession. We wish the society every success, and we trust it will excite that attention to medical ethics and etiquette, which ought to characterize the conduct of every member of the faculty.

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IMPROVED MODE OF HEATING  
HOT-HOUSES, &c.

A RECENT number of the *Gardener's Magazine* contains a plan for heating

hot-houses by the circulation of hot water in hermetically sealed tubes, of small diameter, by Mr. A. M. Perkins. After giving some instances of the beneficial results of Mr. Perkins's plan, in reference to the purpose for which it was originally intended, the conductor of the Magazine says:—"But however favourable this plan may be for heating hot-houses, the advantages for that class of structures are as nothing compared to those which it offers for heating dwelling-houses and all kinds of manufactories. This will be understood at once, when it is stated, that the water may be circulated, under ordinary circumstances of attention to the fire, at from 300 deg. to 600 deg.; and, with extraordinary strength of pipe, and application of fuel, to a still higher degree. It is found, that 400 deg. will roast meat. The workmen, in the bank-note printing-office of Perkins and Bacon, have dressed a beef-steak at the farther extremity of the pipe of hot water, used for heating the steel-plates; and Mr. Perkins is constructing for himself an oven for roasting by water. It is easy to see that, in a very short time, this will lead to extraordinary and most beneficial changes in domestic arrangements; and that, if we could get rid of our prejudices, in favour of open fires, the smoky atmospheres of our great towns would be got rid of at the same time. Water at 500 deg., or at least water at 330 deg., for the purposes of cookery, and for heating reserve cisterns of cold water, or masses of metal or masonry, for various domestic purposes, including warming rooms, heating baths, laundries, &c., may, at no distant time, be circulated by companies, in the same manner as gas; and, in London, instead of one fire for every room, as at present, there may be only one in a parish or in every square of an acre in area."

Perkins's newly invented process for generating steam, is accomplished by so placing a lining within the boiler, that a thin sheet of the fluid which it contains, may be carried constantly over those portions of the side of the

vessel which are in immediate contact with the heat from the fire, formed upon the discovery of the circulation of the fluid under the operation of heat, from that part of the boiler subjected to the immediate action of the fire upwards. It is found that, as the heat is increased, the ascending current becomes more rapid, that the agitation is more violent, and a relatively augmented proportion of steam is produced; whilst the metal, of which the boiler is composed, is preserved from that destruction which would act upon it with more than ordinary violence. A receiver is also placed in the centre of the boiler, into which, by the circulation of the heated fluid from the bottom and sides of the boiler, all dirt or other sediment is thrown; by which another cause of the destruction of the boiler is removed.

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BOARD OF HEALTH

OF THE PARISHES OF

WELLINGTON, WRACKWARDINE,  
WOMBRIDGE, AND EYETON.

*Importation of Asiatic Cholera in a Pair of STAYS.—Fabrication of Cholera Cases.*

IN consequence of two persons having died at a place called Mannerly-lane, Ketley, adjacent to the town of Wellington, and those deaths being attributed to spasmodic cholera, a meeting of the board was called on Wednesday the 19th ult.

The gentlemen present were Colonel Charlton, of Apply Castle, Edward Clud, Esq. of Orton, the Rev. Mr. Owen, Vicarage, James Oliver, Esq., Spring Hill, Abraham Phillips, Esq., Wellington, William Turner, Esq., of Dohill, Mr. Beeston, Surgeon, Mr. Baycott, Surgeon, Mr. Bucknell, Surgeon, Mr. Henry, Surgeon, Mr. Jones, Surgeon, the Rev. Mr. Cameron, with other reverend gentlemen and squires, and *Doctor Mathew Webb of Ketley.*

Colonel Charlton in the chair.

The Rev. Mr. Owen said, that reports were prevalent in Wellington,

that those persons who died at Ketley did not die of cholera, and he called on Mr. Webb, who reported them as such, to satisfy the meeting on the subject, before other business was entered on.

Mr. Webb said, if he ever saw the disease in London, the persons alluded to had had cholera; the man he did not see till five hours after his decease, but he was convinced, from the *appearance of the body*, he died of the disease!!! and if they doubted his word, he would *take his oath* he died of cholera!!!

The female caught the disease from wearing a *pair of stays*, left her as a *legacy* by a woman at Bilston, who died of cholera!!! He further stated, that three other persons at Ketley were then ill from the disease, their names are Rebecca Parton, Rosanna Parton, and a female relative of the deceased, who assisted in putting the body into the coffin, in consequence of which she got cholera, from which she then suffered.

These assertions were *too unquestionable* to leave room for doubt. The conversation then turned to the subject of providing convenient and detached places for burying the dead, for procuring suitable vehicles to bear the bodies to their final destination, and employing persons who would be ready, at a call, to put them into coffins: the surviving friends, *fearing contagion*, might possibly object to perform this duty, &c. &c. &c.

Mr. Henry claimed the indulgence of the meeting; he stated, that having resided in London, during the prevalence of the epidemic cholera, he had had ample opportunity of observing the disease in its various forms, both in public institutions and private practice. He attended the several medical societies of London, where the question of cholera was discussed in all its bearings by the most eminent men in the profession, many of whom witnessed its progress in India, &c. &c. &c. On hearing that cholera was approaching the town of Wellington, a desire of ascertaining the



truth led him to inquire into the facts. On Monday the 17th instant, the day on which these bodies were interred, he went to Ketley, the late residence of the deceased. From the statements there and then made to him, he could produce circumstantial evidence, that the deaths referred to had occurred from ordinary causes. One of those dead was a very old man, for some time past of infirm health, worn down with years of hard labour and indigence; a few days before his death he worked in a damp coal-pit, his clothes got wet, he caught a cold and shivering, and some time afterwards died. He (Mr. H.) did not see the necessity of calling in the assistance of Asiatic cholera to account for that event.

The female was known to have given birth to a child less than five weeks before her decease; she was exposed to much hardship, her husband had little employment, and was at work only two or three days in a fortnight: their means were not sufficient to supply a moderate proportion of food, and this little possibly of inferior quality; she was compelled to go into the corn-fields leasing, before her strength was re-established, collected some corn, which she carried to a mill to get ground; she was detained from an early hour in the morning till six o'clock in the evening, exposed to cold, sitting on the stone steps of the mill; she felt exhausted, was scarcely able to bear home her burden: she consequently fell ill, the parish surgeon was sent for, but did not attend; remaining in this condition for a considerable time, her disease became more aggravated: Dr. Webb ultimately arrived, just in time to find her past recovery. He pronounced the disease cholera.

Mr. H., in this case, saw no reason for such a conclusion:—this woman's death was produced by a very common cause, under such circumstances. Admitting she suffered from vomiting and purging, which was not stated, there are not sufficient diagnostic marks of spasmodic cholera: it was well known, that in attacks of common fever, in almost all general diseases,

there was a disordered action of the stomach and bowels. She fell a victim to disease, arising as an ordinary consequence from exposure to cold, in her debilitated state, which timely and appropriate medical treatment might possibly remove.

Mr. H. here read from his notebook the following cases, represented as spasmodic cholera.

Rebecca Parton, æt. 19, generally enjoyed good health, with the exception of being affected with dysmenorrhœa for the last five months: her legs are somewhat swollen and hard, complexion florid, and occasionally she is troubled with a cough. Notwithstanding, she attended her usual employment at the coal-pit, had a good appetite, good spirits, and did not appear to suffer materially from the uterine disorder. About three days ago there was a slight return of the menses, attended with pains in the loins, &c. This morning, Monday, 17th instant, whilst engaged at work, she states, that she was suddenly taken ill, fell down, was incapable of walking; in this condition she was conveyed home, *Doctor Webb* was sent for, *his apprentice* saw her; sent her an emetic. Mr. H. saw her at one o'clock P. M., she had taken the emetic about three hours before, it had not the intended effect, but appeared to have acted on the skin, as she was warm, and disposed to a free perspiration, the tongue moist, and slightly furred. She complained of great pain in the head; her eyes suffused; pulse 84 in a minute, and full; cough frequent and distressing; breathing rather laborious and hurried; bowels not open since yesterday morning. Mr. H. did not see why this case should be mistaken for cholera.

Rosanna Parton, aged 7, always enjoyed good health. She had yesterday, about twelve o'clock A. M., an apple-pudding to dinner, of which she partook freely. At half-past one P. M. she was seized with vomiting and purging, which continued unabated till this morning. *The doctor* was sent for; his apprentice arrived be-

tween ten and eleven A. M. ; he sent her an emetic (from a portion remaining in a tea-cup Mr H. thinks a solution of tartar emetic). From the combined action of this medicine, and the exhaustion induced by vomiting and purging for upwards of twenty hours, before, the little patient greatly suffered ; the extremities were cold, pulse scarcely perceptible, vital power much depressed, great thirst, &c. &c. She complained of no particular pain. She had neither cramps nor spasms ; her tongue moist and warm ; action of the heart regular but feeble. Mr. H. ordered bottles of warm water to the feet, warm flannels, &c. &c. ; directed a woman present to use friction to the arms, &c., and gave her a teaspoonful of brandy. Before he left, there was a partial re-action excited ; the little patient recovered. He did not discover Asiatic cholera here. No medical man could suspect this case as any other than common English autumnal cholera, induced by the ordinary exciting cause of that disease.

With regard to the relative of the deceased female, Mr. H. saw her ; she attended on the above little patient ; she appeared to be in good health ; there were no symptoms of any cholera about her. Subsequent facts prove the truth of this statement. This woman had no disease whatever either on Monday or Tuesday. It is said she was somewhat frightened when she was told she would get the cholera in assisting to put her friend into the coffin. Several days are now elapsed, but no more deaths are authenticated to have arisen from cholera. We remain free from the disease but not from those whose object is to turn its presence to some account.

You shall hear again from this quarter.

ALETHES.

Wellington, Shropshire.

Sept. 27, 1832.

## Hospital Reports.

CHOLERA HOSPITAL, ST. HILIER'S,  
JERSEY.

Surgeons—CHARLES YOUNG, M.D.

JOHN FOOTE, JUN. ESQ.

Assistant Surgeons—WILLIAM FRANCIS, ESQ.

JOHN MORRIS, ESQ.

*Diarrhœa of a fortnight's duration—  
complete Collapse—Parturition—  
use of the Secale Cornutum—Deliv-  
ery—Death.*

MRS. THRASH, ætat. 40, residing on the Parade, St. Hiliers, a woman of a sanguineous temperament, and intemperate habits, nine months pregnant, expecting to be put to bed every day, was admitted in the cholera hospital, on the 21st of August, 1832. Her bowels had been relaxed for a fortnight previous to admission. She was then in a state of complete collapse ; pulseless, cold skin, tongue cold, fingers and nails blue, &c. She had a stimulating mixture, to take a dose every hour, which, however, did not produce any effect. Labour-pains came on, probably induced by the spasms of the abdominal muscles ; in about six hours, it was deemed necessary to give two scruples of the secale cornutum, which were administered in two doses, with the interval of half an hour. Six hours after the supervention of pains, she was delivered, the case being natural. The child was a male, fully formed, born alive, but died in two minutes ; it was put into a mustard bath, in the hope of saving it, but without avail. She died seven hours after her admission in the hospital.

It is to be regretted that the existing prejudices of the people against the hospital, prevented an autopsy of the child, as it would have been an interesting fact to have ascertained, whether the disease were communicated to the fœtus in utero. The external appearances of the child were natural ; it had one or two ecchymoses on the head. Had an examination been attempted, it is probable that

the same results would have taken place as at Manchester. As it was, the indefatigable assistants, Messrs. Francis and Morris, made every endeavour possible to obtain permission, but without success.

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*Extreme Collapse—no Vomiting—  
Death.*

Benjamin Grainger, ætat. 52, a man of intemperate habits, admitted at one P.M. the 6th September, 1832. Is a sawyer, a hard-working and a hard-drinking man; will take from 12 to 15 glasses of brandy daily. He was taken ill during the night of the 15th with purging of a watery fluid, to which, however, he paid little attention, but went to work in the morning; this he was shortly obliged to quit, and to return home, from the supervention of severe spasm in the gastrocnemii. When admitted, the purging continued; he was in a state of great collapse. Severe spasms, extremities cold, pulse nearly imperceptible, tongue cool, skin cold, clammysweats, \* no vomiting, and has not had any, eyes sunk, with a dark areola around.

Hot sand-bags to the extremities; frictions to the legs.

R *Hyd. submur.* gr. x.  
*Pulv. opii,* gr. j. *℥ ft. pulv. statim sumend. et repetend. quarta hora, si opus sit.*

R *Tinct. opii,* ℥ss.  
*Aque tepide,* lbss. *℥ ft. enema statim adhibenda.*

To be retained by a T bandage and compress.

The first enema was immediately returned, when a second was given, in three ounces of gruel, which was retained.

Two P.M. The cramps continue; has not been purged since the last report; has not vomited; the skin remains cold; pulse perceptible: is bedewed with a cold, clammy perspiration.

\* It is a very curious fact, that there is sometimes profuse perspiration, when the pulse at the wrist is extremely small, or altogether imperceptible.—G. HAMILTON BELL, Second Edit.

*Rep. pulv. statim. ad hibenda hyd. submur.*  
gr. ij. *omn. decem minut.*

Brandy and water for drink.

Three P.M. The cramps continue; is apparently sinking. Rep. medic.

11 P.M. The purging and cramps have entirely ceased; is very restless, in continued jactitation; voice failing; extremities cold.

Died at three in the morning.

—

*Failure of the Cold Water Treatment—Extreme Collapse—Death.*

Edward Bulgin, ætat. four, admitted Sept. 10th, at nine at night. He was taken ill the day before, and assistance obtained from the Central Station. He was seen by Dr. H. and Mr. R., when in the state of collapse; the former of whom observed, that nothing could be done for him. An emetic of ten grains of ipecacuanha was administered, and acted; shortly afterwards, the child had a feculent motion. The cold water plan was tried, with sinapisms to the epigastrium; it is said, that under this treatment, reaction came on, but collapse again occurred: this is stated to have taken place twice or thrice, the collapse constantly ensuing, in consequence of the misery of the friends and the want of proper necessaries. The sinapism was applied four different times, and the water treatment persisted in, until all hope of saving the child was abandoned, when it was sent into the hospital.

When admitted, the vomiting and purging had entirely ceased; no spasms; was pulseless at the wrist, almost so at the carotids; skin cold; eyes half closed, and glazed; and the extremities cold. The cuticle was found to be removed over the epigastrium, by the action of the previous sinapisms; others were applied along the spine, and on the hands and arms: with hot sand bags to the feet. Calomel and aromatic powders were given, but the child could not swallow.

Ten P.M. Is very restless; continues in the same state, without re-

action. The hot-air bath was applied ; it did not produce any effect on the child, notwithstanding the evolution of great heat. The little sufferer died at one in the morning.

Failure of the Cold Water Treatment—Collapse—Death.

Thomas Anderson, ætat. 39, labourer, admitted the 11th September, at twelve A.M. was sixteen hours ill previous to admission. Is a man of intemperate habits. Was seized during the night with vomiting and purging of a rice-water fluid, and was immediately attended by one of the surgeons of the Central Station, who directed sinapisms to the region of the stomach, and ordered him to drink plentifully of cold water. He was admitted into the hospital at noon, in a state of complete collapse ; without pulse, quite cold, skin completely blue, eyes sunk, countenance cadaverous, great thirst, extreme restlessness, laborious breathing, spasms in the region of the epigastrium and lower extremities ; the skin of the hands and feet much corrugated.

Two P.M. Sinapisms with stimulants, and the hot air bath, have been employed, but without producing reaction, either on the skin or pulse ; his respiration gradually became worse until he died.

Mild Cholera.

Modeste Hovey, ætat. thirty, married, has just weaned her child, admitted during the night of the 9th September, 1832, with purging and vomiting of three days' continuance, unattended with much pain or spasm ; these evacuations take place very frequently ; skin cool ; pulse small.

Half past six A.M. :—

- R *Acid. hydrocyan.* (formulæ Domini Schedii) gr. j.  
*Mucil. acaciæ*, ʒj. *statim. sumend. et repetend. in horâ si vomueret.*  
 R *Tinct. capsici*, ʒss.  
*Tinct. opii*, ʒij.  
*Mist. cretæ*, ʒviij. ʒj. *ft. mist. de quâ sumat. cochlearia ampla duo post sedes singulas lipidas.*

Half past seven. Neither the vomiting nor purging have recurred ; tongue foul, warm ; pulse small. To take a dose of the mixture, preceding it by his powder,—

- R *Hyd. submur.* gr. x.  
*Pulv. zinzib.* gr. v. *fiat pulv.*

Nine A.M. Is free from pain or uneasiness ; complains merely of weakness.

Two P.M. She vomited soon after the date of the last report, when she had two drops of the acid, which prevented its recurrence. Pulse very full, quick, 80 ; skin warm ; face rather flushed ; tongue very furred.

- R. *Hyd. submur.* gr. ij.  
*Pulv. aromat.* gr. iv. ʒj. *Pulv. bis in die sumend.*

Seven P.M.

*Rep. pul. bis horis.*

11. Seven A.M. It was necessary to draw the left breast during the night, on account of its being much tumefied ; the irritation it induced caused an increase in the frequency of the pulse. Has taken her medicines regularly ; no mercurial action.  
*Rep.*

12. Seven A.M. The stools are very black ; she is otherwise well.

- R *Hyd. c. cretæ.* gr. x.  
*Pulv. aromat.* gr. v. *Pulv. statim et repetend. in 4tis horis.*

The stools gradually changed their appearance and became healthy, when she was dismissed, after remaining a short time in the convalescent ward.

Collapse—Stimulant Treatment—Recovery—Presence of the Menstrual Secretion—Sanguineous Temperament, &c.

Jane Tobin, ætat. 35, formerly a nurse in this hospital, a woman of intemperate habits, was seized with vomiting and purging on the 8th, of a fluid apparently bilious : she also suffered from cramps. She is now nearly pulseless at the wrist ; extremities cold ; eyes sunk, with a dark areola around ; skin of the hand wrinkled ; vomiting and purging of a watery fluid ; has no spasm, but complains of severe pain in the abdomen.

She says she has not lived irregularly since she left the hospital, but this statement has been ascertained to be false. She came in on the 10th September, at nine in the morning.

Sinapisms to the spine, epigastrium, and feet; hot sand-bags to the hands and arms.

R *Sp. ammon. aromat.* ℥j.  
*Tinct. capsici*, ʒvi.  
*Tinct. opii*, ʒijj.  
*Aq. cinnam.* ℥vj. ℥ fl. *mist. sumat.*  
*cochlear. ampl. duo bis in horâ.*

11 A.M. As soon as the sinapisms excited even a slight degree of pain, she tore them off. She complains of severe pain in the abdomen; pulse nearly imperceptible; skin warm; perspiration; great thirst; has taken two doses of the mixture. Pergat. Repeat the poultices, and keep them on by bandages.

Two P.M. The pulse has returned at the wrist, and the skin is warm: the cataplasms are still on the chest and spine, but have been removed from the feet.

To drink plentifully (if she will) of cold water.

Five P.M. Reaction has taken place; the pulse has risen, 90, and full; is free from pain or uneasiness; body warm; has made water; complains of slight pain and giddiness in the head; eyes rather suffused. The menstrual secretion came on last night, and she says it generally continues for a week. This circumstance prevents the application of leeches to the head, which are otherwise indicated.

R *Hyd. submur.* gr. ij.  
*Pulv. aromat.* gr. ij. *pulv. quater in die sumend.*

Ten P.M. The head-ache is diminished, and likewise the giddiness; she feels easy, but says she has an unpleasant copperish taste in the mouth. Pergat.

11. Seven A.M. Feels some degree of headache and uneasiness; skin warm; pulse quick; tongue coated, and covered with a brown fur; the bowels have not been opened.

Ten P.M. Says that she is going on

well: headache not so great; bowels not been open to-day.

R *Ol. ricini*, ℥j. *statim.*

12. Seven A.M. Could not retain the oil on the stomach; bowels not open; pulse quick; head-ache.

R *Hyd. submur.* gr. v.  
*Pulv. rhei*, ʒss.  
*Pulv. zinzib.* gr. vj. ℥ fl. *pulv. statim sumend.*

Five P.M. The powder has operated well, and she feels relieved.

Nine P.M. Is going on well; head-ache slight.

13. Headache still continues; mercurial taste in the mouth.

R *Hyd. c. cretâ*, gr. x.  
*Pulv. aromat.* gr. v. *pulv. statim, et repetend in pomeridianâ.*

14. Headache continues; bowels constipated.

*Ol. ricini*, ℥j. *tinct. cardam. c.* ʒj. *statim.*

15. The oil operated freely; head-ache still continues.

*Pil. aper. comm. nocte sumend.*

16. The pill brought away a quantity of offensive bile; she feels free from headache, and expresses herself as much relieved; she wishes for another pill to-night. Pergat.

17. Is going on well. Discharged.

#### Second Irruption of the Disease—Collapse—Supervention of Delirium Tremens—Death.

Patrick Henning, ætat. 45, formerly a soldier, a man of intemperate habits, was admitted Sept. the 11th, at half past eleven P.M., in consequence of relapse. This man was discharged from the hospital a week previous, having been cured, by the stimulant plan, of a severe attack of the epidemic.

The locality where he resides, Parade-place, has already furnished numerous victims to this disease. The room in which he lived presents a picture of filth and misery. The poor wretch was lying on a mattress, covered by a rug, in a corner of the room, while a large black dog kennelled by the bedside; two wretched-

looking objects were crouching down in one corner, on and under what appeared to be a heap of clothes; there was only one bed in the room, which was occupied by Henning; the apartment was in a most dirty condition.

The man is in complete collapse; extremities cold; face and lips blue; nearly pulseless; tongue cold; no cramps; neck warm, face cold; laborious breathing; great thirst; cadaveric countenance. He was taken ill at ten this morning, with vomiting and purging of the rice-water fluid; he has not had cramps.

Sinapisms to the spine, stomach, and feet; hot sand-bags to the hands.

R *Tinct. opii*, ℥ij.  
*Tinct. capsici*, ℥vi.  
*Sp. ammon. arom.* ℥vi.  
*Aq. ℥vi. ℥℥ ft. mist. capiat cochlearia  
 ampla duo bis in horâ.*

To drink plentifully of cold water.

Two A M The face is rather warmer, but the pulse has not risen; he complains very much of the sinapisms, which are directed to be removed from the feet, and sand-bags applied. Continue the mixture.

Five A M. Reaction has taken place to a certain extent; the skin is warmer, the pulse fuller, the thirst diminished, and he feels easier. Pergat.

Seven A.M. The vomiting has entirely ceased; the whole body is warmer; pulse rising; tongue warm, very much furred; is free from pain; has taken all the mixture.

R *Tinct. opii*, ℥ij.  
*Tinct. capsici*, ℥vi.  
*Sp. ammon. arom.* ℥vi.  
*Aq. menth. pip.* ℥vi. ℥℥ ft. mist. capiat  
*cochlearia ampla duo sing. horâ.*

Nine A M. Is going on well. Pergat.

Five P.M. Reaction has continued until the present date, but the pulse is now beginning to flag, and the extremities to become cold.

Hot sand bags to the extremities. Rep. mist.

Nine P.M. Extremities cold; pulse feeble; says he is free from pain. Continue the mixture.

13. 7 A M. Has been vomiting the

greater part of the night, but emesis has ceased for the present; he is free from pain; hands rather cold; pulse moderate, about 65.

To have brandy and water for drink.

Twelve Mer. The symptoms of delirium tremens are coming on; he is extremely loquacious, wandering; skin hot: tongue dry and furred; tremors of the hands, &c. He slept a little after his brandy and water. He is directed to have it *ad libitum*, it being the liquor to which he is most accustomed.

Convulsions came on, in the course of the afternoon, and he died at four. The death of this man should rather be attributed to the delirium tremens than to the cholera, from the cold stage of which he had most certainly recovered, and the disease had not existed a sufficient length of time for death to have occurred from the consecutive fever. The delirium was induced, in all probability, as the consequence of one or two fits of debauchery, which occurred immediately prior to the second attack, and the abstinence from the ardent spirit while under treatment; the very rapidly fatal termination was owing to the constitution being exceedingly debilitated by penury, and also by the two very severe attacks of the epidemic which he experienced.

#### Mild Cholera.

Elizabeth Porter, ætat 28, a nurse in the female hospital ward, has been labouring for several days under uneasiness and pain in the bowels, with a foul tongue, for which she was directed to take

*Pulv. rhei*, ℥ss.; *magn. carb.* ℥j.

which relieved her. During the afternoon of the 8th, she partook of some fruit (pears), and, in the evening, took too much grog. In the course of the night she was seized with vomiting and purging of bilious matter, unattended with cramps; skin cool; pulse small, hurried.

Half-past six A.M. :—

R *Acid. hydrocyan.* (formula Scheelii), gtt. j. ; *mucil. acaciae*, ʒj. *statim sumendus, et repetendus in horâ, si opus sit.*

R *Mist. cretae*, ʒviiij.  
*Tinct. capsici*, ʒss.  
*Tinct. opii*, ʒij. *in ft. mist. de qua sumat cochlearia ampla duo post sedes singulas liquidas.*

Half past seven A.M. The vomiting and purging have not recurred; she complains of severe pain at the pit of the stomach; tongue coated, warm; pulse small; skin warm; slight head-ache; has not yet taken a dose of the mixture; to take some presently.

Nine A.M. The pain in the epigastrium has been removed by the mixture; has not vomited or purged. Pergat.

Two P.M. Remains free from pain; pulse full, quick, 80; tongue furred; has made water.

R *Hyl. submur.* gr. ij.  
*Pulv. aromat.* gr. iv. *ft. pil. c. confectioe sumat; bis in die.*

Seven P.M. Has had a yellowish stool. Continue.

10. Is going on well.

*Cipiat pilulas Atis horis.*

11. Complains merely of debility, and soreness of the mouth with a metallic taste.

*Cipiat pilulas 8 tis horis.*

The effects of mercury were fully manifested; she perfectly recovered, and resumed her duties. Had this case been neglected in the beginning, there cannot be a doubt but that collapse would have come on, and she would have had a hard struggle for her life.

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#### GUY'S HOSPITAL.

##### Amputation.

OCTOBER 2. Tuesday was the first operating day of the session. Three operations were performed before a very large class of pupils.

1st. An amputation by Mr. Morgan above the knee, for a waterman (chronic inflammation of ten years' standing) æt. 32, strong constitution and regular habits. The operation was performed with the double flap. Mr. M., on passing the knife through, turned it suddenly out on both sides, making it (when the leg was removed) appear almost like a circular. The usual vessels were tied. He was put to-bed, and is doing well. No bad symptoms since.

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##### Excision of a Tumour.

The second operation was performed by Mr. B Cooper, on a woman, ætat. 63, strong and healthy. About ten years ago she felt a small, round, and hard tumour, about the size of a nut, on the lower part of the spine, which gave her no pain; it continued the same size till November last, when it rapidly increased, and she came into the hospital: it is now about the size of an egg. An incision being made on each side, it was carefully dissected out. She was put to bed, a piece of dry lint being placed over the wound without any other dressing, and the wound allowed to granulate. Is also doing well.

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##### Amputation.

The third operation was an amputation above the knee, for a disease of the bone in the stump. Mr. Key removed the leg three years ago; she came in under Mr. Key, with a fractured tibia and fibula, united at a right angle. She says that after Mr. Key performed the operation she quite recovered; the stump healed well, and she could walk about very well. About ten months since she had a small abscess, which broke, and the stump never healed since. This operation was performed the same as the first; the vessels being secured, she was removed to bed, is doing well, bowels open, tongue clean, &c.

## COUNTY LIMERICK INFIRMARY.

## BRONCHOTOMY.

*(From our Correspondent.)*

PATRICK GLYNN, a gardener of Mr. Maunsell, of Mitford, was admitted into the County Limerick Infirmary, on 1st of August, in consequence of having a difficulty of breathing from a violent inflammation of the throat, which occurred several weeks before; his respiration became so difficult that, in consultation with the professional men of both hospitals, he being a city patient, it was determined to have recourse to the operation of bronchotomy, which was performed the same day by Dr. Thwaites with immediate relief. This is the third time it has fallen to the lot of that gentleman to perform this rare and difficult operation; in the two former cases with complete success, and, in this instance, it is likely to terminate favourably, as he is this day free from difficulty of breathing as long as the canula remains in the opening.

## HÔPITAL DE LA PITIÉ.

*(From our Correspondent.)*

*Gonorrhæal Ophthalmia in a new-born Infant successfully treated by powerful antiphlogistic Means.*

THE following case must be the more instructive as it strongly contrasts with the line of treatment adopted in the endemic purulent ophthalmia, which attacked 299 of 300 children in an orphan asylum in this capital, and of which I sent you the details in a former communication. About a month since, a female, received into the Venereal Hospital, to be treated for a gonorrhœa, gave birth to a child, which in a few days exhibited all the symptoms of gonorrhœal ophthalmia. M. Ricord is of opinion that no time ought to be lost in instituting a most active treatment in this disease; he, therefore, directed that two leeches should be applied to

each of the temples on the first day, effective purgatives on the second, followed by blisters behind each ear, and sncapisms to the feet on the third: by this method the violence of the disease was abated, and in the space of three weeks the infant was free from the slightest symptom of ophthalmia. M. Ricord expressed his firm conviction, that unless the most energetic measures are pursued on the first three days, it will be afterwards almost impossible to check the virulence of this disease, or bring it to a favourable termination. L.

## NECROLOGY.

It is with regret, that we have to add Mr. Power's name to the number of victims to the epidemic; he was employed as assistant in the Cholera Hospital, St. Hilier's, Jersey, and was unwell for two or three days, but had so much recovered on the 7th instant as to be able to walk out; a relapse unfortunately took place in the afternoon, and its progress was so rapid, that, in spite of the exertions of several medical gentlemen, he died at 7 in the morning of the 8th. The announcement of Mr. Power's death caused a great sensation throughout the town, and an universal feeling of regret; the most absurd reports were rife, it was even stated that the whole medical staff were dying or dead. He was buried at the public expense, with due respect. His remains were accompanied to the grave by His Excellency the Lieutenant-Governor, the very Reverend the Dean, most of the Faculty, the Presidents of Districts, several private friends, and the Committee of Management of the Cholera Hospital. His interment took place necessarily within twenty-four hours, as a law exists to that effect. The alarm caused by his death was at one time so great at the Cholera Hospital, that the orderlies, and even the assistants, were all sending in their resignations, as, they said, "they considered their health far more valuable than any emolument they could receive." It soon abated, however. We regret to observe, that the Cholera Hospital is closed, prematurely in our opinion.

Of the sequelæ of cholera, Dr. Martin, of St. Hilier's, Jersey.

## LITERARY INTELLIGENCE.

A NEW edition of Dr. Hooper's Physicians' Vademecum, brought down to the present time, will be published in a few days.

We are happy to learn, that Mr. Radford, of Manchester, is preparing for publication "Practical Observations on Uterine Hæmorrhage," with Remarks on the Mode of Connection between the Mother and the Child in Utero.



## BOOKS.

LECTURES on Anatomy, interspersed with Practical Remarks, vol. iv. By B. B. Cooper, F.R.S., Surgeon to Guy's Hospital, Lecturer on Anatomy, &c. &c. Royal 8vo. pp. 382. Plates. London: 1832. Longman and Co.

This volume concludes the lectures of Mr. Bransby Cooper; and we are convinced that a more graphic and useful work on anatomy, physiology, and most points of surgery is not to be found in our language. It embraces every recent view on the important subjects of which it treats, and while it instructs the student in first principles, it places before the practitioner scientific and accurate views of surgical anatomy and operations.

New Theory of the Influence of Variety in Diet in Health and Disease, accounting for obscure Affections, hitherto but little understood, and tending to elucidate the nature and requisite Treatment of existing Epidemic Cholera. By Charles Cameron, Surgeon, R.N. 8vo. pp. 104. London: 1832. Highley.

This is an interesting production. The author is evidently a gentleman of observation and original mind. We like his motto, that of his native country, *Nemo me impune lacessit*. There is a bold, independent tone evinced in th's work, which proves the author to be one who thinks for himself.

The Address and Laws of the General Practitioners' Society of Southwark and its Vicinity.

## NOTICE TO CORRESPONDENTS.

*Alethes*.—The second communication, though an able defence of the dignity of the profession, is clearly libellous, and should be changed before insertion. Experience has taught us, that we must dip into our purses very deeply for our defence of the whole profession; and, as the constituted authorities tolerate empirics and humbugs, we shall in future leave these gentry to fight their own battles. If the statement of our valued correspondent be true, that country bone-setters, blacksmiths, and horse-leeches are allowed to associate with legally qualified practitioners on Cholera Boards, he has just reason to complain of such an insult to the respectability of the profession. We are not surprised, however, at such an occurrence, for many unqualified persons were cholera hunters and puffers in London. If he knew as much of the policy of the profession as we do, he would not be surprised at this, as we could prove that fully one-half of the practitioners in London are neither physicians, nor surgeons, nor apothecaries; but quacks, who may slay his Majesty's lieges with perfect impunity. We shall expose this nefarious system as far as the law allows us; but must decline another visit to the Court of Common Pleas, so long as we can avoid it.

The members of the profession, who consider the damages awarded in the case of

Ramadge v. Ryan excessive, have commenced a subscription to enable the defendant to apply for a new trial, or defray his expenses.

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# London Medical and Surgical Journal.

No. 38.

SATURDAY, OCTOBER 20, 1832.

Vol. II.

## LECTURES

ON THE

## PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

Delivered at the University of London,

SESSION 1832—1833,

BY

PROFESSOR SAMUEL COOPER.

LECTURE III, DELIVERED OCT. 8, 1832.

GENTLEMEN,

TO-NIGHT I will finish what may be called the preliminary matter of the course. In the concluding part of the lecture on Thursday evening, I was considering the *common exciting causes of disease*, and was noticing the *fact of some diseases being frequently the exciting causes of others*.

The aneurism of the aorta, which was then upon the table, showed that the original disease of the great artery had subsequently excited, by its pressure, disease of the ribs—disease of the spine, so as to have denuded the medulla spinalis—and disease of the muscles of the back, and disease of the trachea, into which the aneurism had made its way by ulceration, near the bifurcation of that tube. How frequently do we see the origin of scrofula excited by the effects of small-pox, measles, and other disorders incident to children. How often do we find the irritation of scalled head exciting swelling of the lymphatic glands of the neck in scrofulous children. A fracture, a dislocation, a wound, or any mechanical injury, may excite tetanus, profuse abscesses, necrosis, and other forms of subsequent disease. The deposition of the phosphate of lime, between the internal and middle coats of the arteries, sometimes leads to the formation of aneurism, and sometimes, in old persons, to chronic mortification of the lower extremities.

Injuries of the spine sometimes become an exciting cause of disease of the bladder. The

urine assumes a strongly ammoniacal quality, and the coats of that organ are apt to inflame, ulcerate, and become softened in an extraordinary degree. In the preparation which I now show you, taken from a patient who had a fracture of the spine, these morbid changes in the bladder are well illustrated.

Disease of the prostate gland is often the exciting cause of thickening and disease of the coats of the bladder, and of that change which is called the sacculated bladder, where pouches are formed between the fibres of the detrusor urinæ muscle, in which pouches stones may also be formed. In the preparation to which I now request your attention, these circumstances are all plainly shown. From one of the pouches, a calculus had been extracted.

Strictures in the urethra frequently excite, likewise, disease of other parts, as thickening of the coats of the bladder, the formation of sacculi in it, and ulceration and fistulæ in the perineum. In the preparation which I now exhibit to you, all these facts are illustrated: the openings of the fistulæ by the side of the caput gallinaginis are wide enough to admit the largest catheter.

*Specific exciting causes*, comprising the subjects of contagion and morbid animal poisons, are another inquiry of deep interest; but as much of it belongs more properly to the medical lectures, and we shall hereafter have to devote some time to the consideration of the effects of the venereal, hydrophobic, and some other poisons, I shall now merely observe, that contagion and infection are termed *direct*, when communicated immediately from the patient himself to a healthy subject; but *indirect* when transmitted through the medium of articles which have been in contact with the patient's body, as his clothes and bedding. Some infectious diseases can be propagated only in the first mode—others in both.

Gentlemen, your ideas cannot be too precise respecting the sense attached by every well-informed practitioner to the term *symptoms*. Symptoms mean every change perceptible in an organ, or function, and, at the same time, really connected with the existence of the disease. This latter specification is essential; for an alteration, not depending upon the disease

itself, is no symptom, but only an accidental circumstance, or complication.

In strict language, a *symptom* is not exactly the same thing as a *sign* of a disease; the latter term being applied to whatever leads to the discovery of hidden, and not immediately obvious, circumstances respecting the past, present, or future state of the complaint.

Gentlemen, a *symptom* is manifest to the external senses; a *sign* is what the judgment deduces from the consideration of various particulars concerning the causes and progress of the disease, and the effect of the treatment upon it. By making due inquiry into these circumstances, the practitioner becomes enabled to make himself master of what is termed the *diagnosis* of the disease, and to foresee the probable duration and termination of it; in technical language, to deliver a correct *prognosis*. Attention to all these points qualify him to be a good judge of the requisite mode of treatment.

Pathologists lay down some very useful distinctions in the *signs* and *symptoms* of diseases, which are termed *common*, when they attend several disorders, as pain and difficulty, or impossibility of motion, noticed equally in cases of fracture, contusion, dislocation, and rheumatism; and *proper*, or *essential*, when they invariably accompany a disease, as the noise or sensation, the crepitus, the grating, of the ends of the injured part of a bone against one another, when they are moved, and the particular changes in the shape and length of the limb produced by the action of its muscles, or its own weight, in the instance of an oblique fracture of the thigh, or of both bones of the leg.

*Pathognomonic signs* are those which present themselves in one disease, and in no other; consequently they afford a formal indication of its nature, as in the collision of the steel instrument, called a sound, against a stone, or other extraneous body, in the bladder.

*Diagnosis*, gentlemen, has for its object the discrimination of a disease from all others, which may have some analogy, or resemblance, to it. A proficiency in this important part of pathology can only be acquired by the most careful examination of all circumstances appertaining to the disorder, and especially by a judicious inquiry into its causes and different symptoms, which are to be compared with those of other affections, likely to be confounded with it.

Diagnosis is at once the most useful and difficult part of our profession; for it is by ascertaining the exact character of each form of disease, that we learn the right things to be aimed at in the treatment, or the *curative indications*, as medical practitioners express themselves.

Mistakes in the diagnosis are frequently productive of the most deplorable consequences to the health and life of the patient, and of ruin to the practitioner's reputation and prospects. In such cases, a murderous im-

postor and quack will sometimes be shielded by his dupes, the public; but a regular member of the profession will receive no commiseration, and be inevitably left to his fate.

One mistake generally leads to another, and if the cause of a disease be misapprehended, an erroneous diagnosis, prognosis, and treatment, are the usual consequences.

How frequently are mistakes made in the diagnosis of pregnancy and diseases of the womb! How often are limbs amputated which might be saved! How common is it to hear of hydroceles being mistaken for sarcoceles, and the testicle unnecessarily removed! How frequently are herniæ confounded with glandular swellings! Dislocations with fractures, and simple bruises of the hip with fractures of the neck of the thigh-bone!

I have seen more than one case, in which the penis was amputated for disease imagined to be carcinomatous, and to affect the glans and deeper textures of that organ, as well as the skin, but which proved afterwards to be confined to the prepuce, the extirpation of which alone would have been sufficient.

I know of cases, in which patients were cut for the stone, though none was present in the bladder, or had ever been in it.

Having alluded to the mistakes of others, I ought not to conceal my own. I once cut into the bladder when there was no calculus in it. However, one of small size was lodged in the perineum, and just as I was about to send the child to bed, my finger detected it in the upper part of the incision. In this example, as soon as a sound, or staff, entered the bladder, its convexity rubbed against the calculus, which projected a little way into the urethra, and the sensation, communicated to the fingers, was so much like that produced by an instrument touching a stone in the bladder, that a deception was produced. I am happy to say, the patient very speedily recovered, without a single bad symptom.

Professor Bèclard used to relate a case, in which a man had a fistulous ulcer in the cheek, in consequence of a wound. The surgeon, who dressed it for three months, was surprised to find the dressings, when they were taken off, always of a beautiful green colour. Bèclard, having probed the fistula, detected an extraneous body in it, which proved to be the copper-head of a walking-stick. It was taken out, and the part soon healed.

Here one of the first principles in the treatment of wounds had been neglected, viz. the search for extraneous substances and their prompt removal.

*Prognosis*, gentlemen, is an opinion, or judgment, given on the changes likely to happen in the course of a disease, or the benefit to be expected from the treatment, and on the issue of the case.

In the practice of surgery, the prognosis is founded upon the consideration of the causes, nature, intensity, and situation of diseases; the patient's age, sex, and profession; the ge-

neral condition of his strength; the simplicity, or complications, of his disorder; the efficacy, or inefficacy, of the resources of medicine and surgery; and the degree of severity and danger of any operation which may be required. On the subject of prognosis, a surgeon ought generally to be reserved. Instructed, by experience, of the many circumstances, which may alter the natural and usual course of a disease, a wise practitioner will always speak in a guarded manner, little as the uncertainty may really be in his own mind about the event. Young, inexperienced beginners are generally much bolder in delivering a prognosis, than those who have seen more of business. The foretelling of the event of a disease correctly certainly raises a surgeon very much in the estimation of the public; but, on the other hand, if his opinion should be contradicted by the result, he loses even more reputation, than he would have acquired, had his prognosis turned out to be well-founded.

Patients sometimes recover under the most hopeless circumstances; and, in other instances, are carried off by the most trivial complaints and operations. A waterman was under the care of M. Dubois, of Paris, who, by mistake, had let the blade of a sword, about twenty inches in length, slip down the œsophagus into the stomach. An abscess having formed in the right groin, this enormous foreign body was extracted, and the patient got well. Gentlemen, as you may have some difficulty in crediting this statement, I may mention, that Professor Cloquet assures us he saw the case himself. A French soldier, at the battle of Talaveira, was struck by a grape-shot, which broke the os pubis, penetrated the bladder and rectum, and passed out through the sacrum. From all these injuries he recovered, but soon afterwards had symptoms of stone, and underwent lithotomy. Each of the calculi extracted was found to have in its centre a fragment of the os pubis as its nucleus.

In the museum at Leyden, an enormous piece of a bombshell is preserved, which entered the perineum of an artilleryman, and made its exit through the parietes of the abdomen; yet this poor soldier recovered.

As instances of the fatality of very slight injuries, I may mention several examples, which have occurred within the circle of my own observation, where patients died of erysipelas of the head and face, excited by the removal of tumours not exceeding a pea in size. A lady, the wife of an eminent stock-broker, consulted me, about three years ago, for a small tumour on the nose, which was certainly not larger than a pea. As it had shown a disposition to increase, and was no ornament to the countenance, I recommended its removal, but advised her, if she had any doubt about the propriety of the operation, to take the opinion of another surgeon. She went to Sir Astley Cooper, who not only approved of the advice I had given her, but put it in execution on the lady's first visit to him. In

about a week, she died of erysipelas, excited by this trivial operation. Cloquet saw two cases, in which the extraction of the incurvated nail of the great toe was followed by death. In one of these patients, chronic mortification ensued; in the other, phlegmonous erysipelas. The same gentleman tells us of two patients, who died immediately after the trivial operation of dividing the prepuce. Another fell a victim to tetanus, brought on by merely making a seton in the side of the chest.

TERMINATION OF DISEASES.—Diseases end in different ways.

1st. In a *perfect cure*, or complete re-establishment of health.

2d. In an *imperfect cure*, as is exemplified in fractures, united with much deformity, and a shortened state of the limb; and also in the operation for cataract, which always leaves the eyesight defective.

3d. In a *cure, with loss of certain organs*, as we notice after amputation of limbs, and the removal of the eye, testicle, or breast.

4th. Diseases of an *acute* kind may terminate by becoming *chronic* or by *changing into others*. Thus a retention of urine may terminate in an urinary abscess, followed by urinary fistulæ; and a strangulated hernia, after becoming gangrenous, may give rise to an artificial anus.

Lastly. *Many diseases are incurable*: such are the generality of organic affections.

CLASSIFICATION OF DISEASES.—PLAN OF THE COURSE, &c.

Gentlemen, I next request your attention, for a little while, to the classification of those diseases, which are reputed to be surgical.

The plan of the present course of lectures will then be explained; after which, we shall be prepared to enter upon the subject of inflammation, the first usually treated of by all writers and lecturers on surgery, and one of the most important.

That the adoption of a plan materially facilitates the task, both of the teacher and the student, cannot be doubted; for surgical diseases, as they are not very scientifically called, including the different accidental injuries and their consequences, amount to a vast number, attended with such diversity as would create extreme confusion, if some attempt at arrangement were not made.

It is not for me to pronounce positively, whether it be possible to invent an unobjectionable nosology of surgery; but I may safely declare, that no endeavours to produce one have hitherto succeeded, nor is there at present any great probability of success. The observations, made in the first lecture, will lead us to foresee some difficulties in the very beginning of such an undertaking; medical and surgical cases not always admitting of a precise separation, and the whole science, on which the comprehension and treatment of them are founded, being absolutely indivisible.

A complete nosology, or nomenclature and classification of diseases, ought of course to include all of them; but, when the scheme is to divide it into two portions, one allotted to physic, the other to surgery, we find the suggestion of the thing more easy than its performance. Supposing, however, that it were executed, we should have at best only a mutilated system, little corresponding to nature.

Perhaps the opinion of a learned professor in France may be perfectly true, that, strictly speaking, there are no diseases to which the epithet *surgical* should be applied: we have surgical means of cure, a surgical division of therapeutics, the importance and efficacy of which are generally acknowledged, but no diseases meriting the name of surgical, as contrasted with medical. The great reason for this opinion is, that the same principles of physiology and pathology apply to the whole of practice.

Classifications in natural history, as, for example, in mineralogy, zoology, and botany, extend to all known minerals, animals, and plants. This is as it ought to be; and we must entirely agree with one just remark, on the subject of classifications, namely, that Linnæus would never have succeeded in raising an imperishable monument to his own fame, in the science of the vegetable kingdom, had he excluded from his system cultivated plants, under the pretext, that they were only things of interest to those who cultivated them.

With respect to diseases, they certainly do not present any natural features, or differences, half so strongly marked and half so free from deception, as those upon which the classifications of naturalists are founded. The distinguishing marks of animals are permanent objects, but those of diseases are transient, and always undergoing silent and gradual mutations. The zoologist, in his division of animals into those which have red blood, and into others whose vessels contain a luid colourless fluid, or into warm and cold-blooded animals, has a criterion, which is plain and free from all ambiguity. We may say the same thing of another great division of animals into those with vertebræ, and into others without them. The criterion consists of an anatomical fact, which will remain immutable as long as nature herself has an existence.

When, in natural history, classifications are also founded upon certain habits and modifications of function, necessarily implying peculiarities of organization, the ground of arrangement is what will never yield. Thus, the division into herbivorous and carnivorous animals, and the subdivision of the former into those which chew the cud, or ruminant, as it is termed, will stand for ever.

The botanist, likewise, in the classification of plants, has principles for his guidance, on which a rational dependence can be placed. Thus, the absence, presence, and number of cotyledons; the relative position of the stamina; and the absence, presence, and form of the

corolla; constitute permanent marks of distinction, which have been proposed as the basis of Jussieu's classification.

But, gentlemen, in composing a nosology, or a system of arrangement and nomenclature for diseases, you will find that these are not always so strongly marked from one another, by the hand of nature, that their essential difference can be recognized with much certainty. There is even no abrupt line between health and disease; one being shaded off into the other; and this is not only the case with respect to health and disease, but also with diseases in relation to one another.

The opinion of Laennec on this subject may not be incorrect; namely, that the arrangement of diseases into genera and species is incompatible with the nature of medical science. The zoological and botanical specimens are distinct beings; while diseases are merely modifications in the texture of the animal organs, in the composition of their fluids, or in the order of their functions. However, notwithstanding the radical imperfection of nosologies, which contemplate diseases as genera and species, such works may abound in valuable matter, and be, on this account, deserving of our study.

One common mistake into which the generality of nosologists fall, is that of representing what may be only the symptom of a disease, as a separate and independent disease itself. Strictly speaking, dropsy, paralysis, convulsions, dyspepsia, and many kinds of ulcers, are only symptomatic affections. In the nosologies which I have looked over, at least one-third of the catalogue is made up of diseases, which ought, properly, to be regarded as the symptoms, or consequences, of another original affection.

After these explanations, how can we wonder that every system of nosology, however admired at first, seems, after a time, to display defects and incorrectness, which bring it into neglect or oblivion? The principles of arrangement, followed even by the great Cullen, lead only to errors, confusion, and absurdity; and if his writings had not merit of a more sterling quality than what belongs to his classification, they might be thrown into the river Lethe, without any detriment to medical science.

The immortal Bichat, who was, beyond all comparison, the greatest physiologist that France ever produced, rendered an infinite service to medical science, when he explored the nature of the elementary tissues of the body. As already remarked, in the Introductory Lecture, although the organs are numerous, the textures which enter into their formation are few. Thus, we have cellular, osseous, mucous, serous, glandular, muscular, dermoid, and two or three other tissues, constituting the whole diversity and assemblage of them.

Now, gentlemen, one arrangement of surgical diseases might be formed by describing

those of each tissue in succession. The principle of classification might thus be anatomical; but, unfortunately, we do not always know with precision, whether a disease commence in one texture or another; and, in its progress, it frequently involves several. Thus, phlegmonous inflammation and abscesses are not simply affections of the cellular membrane, as sometimes represented, but often implicate other textures, and, in some instances, perhaps commence in them. When I have a phlegmonous inflammation on the surface of the body, following a slight abrasion of the cuticle, can it be said to begin in the cellular membrane?

Professor Richerand classes sarcomatous tumours as diseases of the cellular tissue; yet, according to the views taken of the subject by other pathologists, such swellings are absolutely new formations altogether. The same remark applies to encysted tumours, sometimes arranged also as diseases of the cellular tissue. I believe them to be, in many situations, completely new productions. One most experienced surgeon, who has paid a great deal of attention to the nature of those which occur on the surface of the body (I mean Sir Astley Cooper), believes that they arise from obstruction, and enlargement of the cutaneous follicles. An arrangement of a course of surgical lectures, on the principle of elementary tissues, is, then, decidedly objectionable; for it plunges us directly in hypothesis, inasmuch as it always compels us to pronounce whether a disease originate in one texture or another, which may be a very doubtful point.

Another disadvantage of the plan is, that it brings together various affections, which have not the slightest analogy to one another. Thus: suppose we decide to treat of the diseases of the glandular tissue, is it not a strange confusion to bring into the same chapter, or lecture, diseases of the tonsils, prostate gland, mammary gland, thyroid gland, testicle, salivary glands, and other parts, whose structure, functions, diseases, and position in the body, are so different?

In whatever arrangement we adopt, I believe, we cannot avoid bringing together the different diseases of the same part; but here we add to the confusion, by blending together the different diseases of several parts, merely because they are called glandular.

On account of these and other difficulties, no surgical writer, or lecturer, has been able to complete an arrangement on the foundation of elementary tissues. Partial attempts are occasionally made; but they invariably terminate in a leap from this ground to some other. As far as I can judge, the principle will apply very conveniently to morbid anatomy, but not to surgery.

Instead of a classification of diseases, then, founded upon the consideration of the particular tissue affected, or supposed to be affected, I decidedly prefer the arrangement which takes a separate view of the diseases of each particular organ, or system of organs, concerned in one function.

In France, Professor Richerand's classification of surgical diseases is partly constructed on this foundation; and, in this country, Dr. Mason Good's "Study of Medicine," which enjoys high reputation, is wholly a physiological arrangement of diseases, built upon a review of the great animal and vital functions, the diseases of the organs of each function being considered in succession.

Gentlemen, when you commence hospital attendance, and begin to make your own observations on diseases, you will soon discover, that by far the greater number of those which usually fall under the care of surgeons, are attended with inflammation, suppuration, abscesses, sores, mortification, erysipelas, wounds, hemorrhage, fractures, and other mechanical or chemical injuries of the textures of the body. You will also soon find out, that the knowledge of these subjects, combined with correct anatomical information, and some acquaintance with therapeutics, will qualify you, at all events, to make a beginning in practice. Hence, it used to be an observation of the late Dr. Armstrong, that, if we add to inflammation and its consequences a few organic affections, as tubercle, fungus, cancer, and melanosis, we have, at once, a bird's-eye view of disease.

All writers and lecturers on surgery commonly begin with inflammation and its effects, widely as they may diverge from one another afterwards. The usefulness of this plan cannot be doubted; and it is that which I mean to pursue in these lectures.

Inflammation, with its common effects and occasional consequences, suppuration, mortification, and ulceration,—and then wounds, hemorrhage, and a few other topics, will be first introduced to your consideration, as composing what we may call *rudimental* subjects of surgery. I shall then proceed with the rest of the mechanical injuries; and afterwards with diseases of bones, arteries, veins, and other organs of extensive distribution in the animal machine. Next, the different kinds of tumours will be noticed; and these will be followed by certain specific diseases.

For the sake of order and method, however, the course will be divided into three parts.

The First Part will treat of *General Surgical Subjects*, or of those injuries and diseases which are common to the whole or several parts of the body, or are not confined to any one situation in it.

The Second Part will treat of *Particular Surgical Subjects*, or of the Injuries and Diseases of Individual Organs and Regions.

The Third Part will comprise the *Operations of Surgery*, which will be exhibited on the Dead Subject.

As I proceed through the course, the requisite instruments, bandages, and apparatus, will be shown.

I am of opinion, that a very good account of all the leading things in surgery may be comprised in about ninety or a hundred lectures. But the lecturer must aim rather at the explanation of principles, and the facts on which

they are founded, than at lengthened details; neither must he spend time on the consideration of topics which belong, by the agreement of the profession, to physic. Were I to occupy your attention with gout, rheumatism, and several cutaneous diseases, which the professor of physic will describe with his usual perspicuity, the copiousness of these lectures might be increased by it, but not, I think, their value.

Some subjects, however, it will be impossible for me to be very brief upon, without failing to make you understand even the common principles which regulate the practice of surgery. For instance:—If I were to be too concise in my description of inflammation, a process so extensively concerned in diseases in general, how could I hope to see you attain that proficiency in surgery which would qualify you to become eminent members of the profession? If I were to offer but a superficial account of suppuration, mortification, ulceration, wounds, hemorrhage, aneurism, fractures, dislocations, cancer, the venereal disease, scrofula, injuries of the brain, diseases of the eye, affections of the urinary organs, &c., I should not, gentlemen, be doing you justice, nor serving my own reputation.

The course delivered here last season consisted of about one hundred lectures; but, in order to be able to give so many, I was obliged to lecture in the spring sometimes as often as five times a week. This was occasioned by the examinations, which took up nearly an hour every week. Now, if these lectures could keep your attention alive three hours a week, free from interruption, and you would devote half an hour on Thursday evenings to examinations, you would have a better course, and it might be finished very well by the end of April, without requiring you to attend so often in the week as I did last April and May. I propose, therefore, to lecture three hours a week, and to examine after the lecture-hour on Thursday evenings.

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NOTES FROM THE INTERESTING  
LECTURES OF  
PROFESSOR MAGENDIE,  
ON CHOLERA.

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DR. MAGENDIE proposed to himself, in investigating the cholera, during the epidemic in Paris, the application of the same rigorous plan which, during twenty years, he has been in the habit of adopting in his other investigations; by this method only, which is calculated to keep in check the workings of the imagination, can science be benefited, however it may show that much must still remain unexplained. Many important questions connected with the epidemic must, in short, be considered still as inexplicable.

One glance at a patient labouring under cholera in its severe form will give an impression which the most energetic language must fall far short of conveying.

With regard to *cholérine*, it may be considered more as an indisposition than as an actual disease, and may be rendered serious by the exhibition of violent remedies, or by the patient being induced to consider it of a dangerous nature. It is of high importance to consider that *cholérine* assumes different forms, proving, he thinks, that “the cause of the epidemic was not *transported*, or *imported*, but a general cause acting on a whole population.” *Cholérine*, or *petit cholera*, is to be considered, in consequence of its various shades and forms, of the highest interest, for it is not possible to speak of it as an imported disease, or to bring forward after the consideration of it, the *absurd* idea of contagion.

It must be observed, that “when speaking of the epidemic called cholera, it must not be supposed that one form only of disease is every where to be met with.” It has been observed, that differences so striking have existed between cases, that “one may be induced to believe that, during the cholera, several epidemics are reigning at the same time. Whether the symptoms of the disease, its rapidity, fatal termination, or the different pathological alterations, &c., be considered, the most opposite things present themselves.”

Many cases have occurred in the hospitals proving gradually worse, from a state of simple indisposition, and in which death, by a sort of *anéantissement*, took place on the seventh or eighth day; the last symptoms inducing you to believe that pressure on the brain existed. These die without those symptoms of purging, blue skin, sunken pulse, &c. taking place in the progress of the disease, which are so remarkable in the more ordinary severe forms. An entirely different form of disease may be said to exist. The patients seem to be carried off like persons dying of old age.

Even in the algid form, many shades take place: some will be tranquil, desiring only to be suffered to remain so; while others are highly excited, and refuse all treatment proposed. Unless many cholera cases are seen, the different shades which occur in the disease cannot be noticed.

A particular grade of the disease is when an acute pain in the stomach takes place, which resists every thing, and hurries the patient to the grave without any abatement of intensity.

In the blue, or algid form, prodromes are common, not of invariable occurrence, however; more common among the poorer classes than in those of easy circumstances.

“The blue cholera is composed of various phenomena; the most remarkable are—1st, the absence of the circulation of the blood; 2d, the existence of cramps; 3d, abundant evacuations by stool and from the stomach.” These comprise others to be hereafter noticed. Some of the phenomena admit of explanation, according to physiology founded on experiments, while others remain inexplicable.

The fundamental phenomenon of the algid cholera is the suspension of the circulation, arising, principally, from the diminished power

of contraction in the ventricles of the heart. But there are cases in which the circulation continues; so that if you turn away your head, you fancy that you are feeling the pulse of a person in health.

The cholera asphyxia has sometimes proved so rapidly fatal, as to have been named *soudroyante*. In other instances, as at the *Hôtel Dieu*, it has been prolonged to three or four days, without reaction having been produced by any of the various methods employed.

By a practised eye, the first degrees of cholera have been observed in the countenances of persons during the epidemic; the debility in the action of the left ventricle being displayed by a slight change of colour.

The lividity, in a case of cholera asphyxia, is produced by the simple stagnation of the blood in the venous system, the arteries being empty; far from being of an inflammatory nature, which would imply obstruction to the communication between the arteries and veins, the redness, or lividity, in the intestines, &c., after death, may be made to disappear by injecting warm water into the arteries, which will pass into the veins.

In cholera patients, arteries have, in some instances, been opened and found quite empty; even where their recovery afterwards has been known to take place.

Dr. Magendie thinks that considerable modification must take place regarding the received doctrine of the influence of the blood or the contraction of muscles, seeing that individuals, without pulsation in the limbs, &c., for many hours, or even for days, have been able to execute movements as freely and rapidly as in health. How, he asks, does it happen that muscles, which do not receive blood, should contract? On dividing the principal branches of the temporal artery, with the muscle also, a few drops of venous blood only flowed, the whole giving the appearance of parts in a dead subject; muscular contraction, nevertheless, was going on.

Do the cerebral functions often maintain their integrity in those cases where arterial blood is not sent to the brain? Dr. M. thinks that this is established too in cholera. If, in the algid state, any blood be received by the brain, it is at least certain that it is not red *oxygenated* blood.

Dr. M. seems to favour the idea, that, in those cases, the integrity of the mental faculties does sometimes exist for many hours before death, *without any circulation whatever of blood in the brain*.

The suppression of urine would seem to be sufficiently accounted for on the principle of a diminished circulation in the vessels of the kidneys; so also in regard to the liver.

Does the continuation of the mammary secretion in nurses depend on the vicinity of the parts to the heart, and consequent probability of circulation being maintained? It is still curious that, as shown at the *Hôtel Dieu*, this secretion should have been freely carried on

during two days of collapse, and when dark blood was shown to have been circulating.

[We shall continue to give notes from these valuable lectures as soon as they reach us.—Eds.]

## A SLIGHT SKETCH

OF THE

### CHOLERA,

*As it appeared at St. Hiliers, Jersey, in the months of August and September, 1832, with a Topographical Description of the Island.*

By JOHN FOOTE, JUN., Esq.,  
*Late Surgeon to the Cholera Hospital.*

THE island of Jersey lies in 49° 16' north latitude, and 2° 22' longitude west of London. Its extreme length, from the north-west to the south-west, is twelve miles, and its greatest width about seven, with a population of 36,000 individuals, of which about 20,000 are inhabitants of St. Hiliers. The land on the north-eastern coast, which is abrupt and rocky, rises to a considerable height, and with a gradual but unequal inclination, slopes towards the south, where its elevation above the sea is trifling. It is nearly surrounded by long ridges of rocks, broken by several bays, and, on this account, the approach to the island is very dangerous to the stranger. Of these bays, St. Aubin's is of the most importance, as the towns of St. Hiliers and St. Aubin's lie on the eastern and western sides. It is about three miles wide at its mouth, sweeping above two miles into the land; it opens exactly to the south.

The country appears in many places exceedingly well wooded, and in nearly all very fertile, the only part forming an exception to this rule being the *Quenvais*, a waste of 700 acres, absolutely barren, situated in the parishes of St. Peter and St. Brelade. The soil is very productive, light and occasionally sandy on the higher grounds, but rich and deep in the valleys and lower lands. Water is every where plentiful, there being numerous small streams running through the valleys, and various medicinal springs, principally chalybeate, which, however, are not had in great esteem. The principal produce of the island is the apple, from which large quantities of cyder are made. The lower classes of inhabitants are generally industrious, but, from the extreme cheapness of spirituous liquors, are nearly, if not quite, as generally intemperate.

St. Hiliers is apparently a good situation: it is defended by a range of hills from the northerly winds, and has a good supply of water. The streets, which have been lately erected, are tolerably wide, but can scarcely be said to



be regular. The older part of the town is irregular, close, dirty, and ill ventilated; in some parts very thickly inhabited, especially by the lower classes; in Parade-place, for instance, the houses are as dirty, as crowded, and as ill ventilated as in any part of Saffron-hill or St. Giles's. The filth of the town is removed by several common sewers, which traverse it, but being very generally in a dilapidated condition at present, new and larger are being constructed. It is protected, in a military point of view, by Fort Regent on the Mont de la Ville and Elizabeth Castle, which is three-quarters of a mile distant from the town, situate in the bay of St. Aubin's, on the rocks, and nearer the harbour of St. Hiliers than the town of St. Aubin's. The whole line of coast is defended by martello towers.

St. Aubin's, the nearest town to St. Hiliers, situated in the parish of St. Brelade, lies nearly at the extremity of the bay. It is a neat pretty town, but irregularly built; it is not of much commercial importance at present. This town, although scarcely three miles from St. Hiliers, and in constant communication with it during the prevalence of the epidemic, never had more than three cases, a strong argument against the doctrine of contagion. Between St. Aubin's and St. Hiliers, or rather near the first martello tower between the two towns, is Gallow's-hill, where tents were pitched as a temporary residence for those who, being born on the island, were ejected from their homes, on account of the density of the population in their quarters. Gorey, a village situate in Granville, about four miles to the left of St. Hilier's, is fast increasing in size and importance; its population is greatest during the time of the oyster-fishery, by which the inhabitants are almost entirely supported. This village suffered severely from the ravages of cholera.

It is said, that the winters are mild, and commence late; they are attended with a good deal of rain, and often with gales of wind, which occasionally blow with great violence from the south-west, the prevailing quarter during that season. Snow seldom remains many days on the ground, and frost is rarely known to continue longer than is necessary to check premature vegetation. Having thus given a short account of the topography of the island, as far as lay in my power, I shall now proceed with the real subject of my paper.

#### SKETCH OF CHOLERA AT ST. HILIER'S.

According to the information which I received on my arrival at St. Hiliers, the cholera first appeared as an epidemic in that town, on the 10th August, 1832, although I may state, on the authority of Dr. Struvé, a practitioner residing in the island, that he had observed several sporadic cases throughout the preceding summer. When it first appeared, the town was divided into twelve districts, having each a medical man, a president, and examining committee (non-medical) attached. The duties of the medical men may be readily defined; they

visited the sick whenever called on, and followed up the case, if cholera; if not, they handed it to the surgeon for the parochial or island poor, as the case might require; those of the presidents and examining committee were to visit daily all the houses in the district allotted to them, to ascertain whether illness were in any house, to report suspicious cases to the medical attendant, to clear out, and caused to be cleansed, all the common sewers and places which were offensive, to have all nuisances removed, to require houses to be white-washed and fumigated when they thought it necessary, to have clothes, furniture, &c. burnt, when a medical certificate declared it needful, and to report on all these various duties to the Central Board of Health at Jersey. About the same time apartments were taken at the guard-house in the Royal-square, which were fitted up as a dispensary, and to which two medical gentlemen (the number afterwards increased to four) were attached. This place was called the Central Station, and the duty of its medical officers was to attend to all calls; and, after the hospital was established, to send such patients to it as were willing to be treated there, for which purpose there were men and conveyances always at the station. The store-rooms, adjacent to George-street, on the shore, and nearly opposite to Elizabeth Castle, occupied by M. Nicolle, were given up by him forthwith as an hospital, for which purpose they were fitted up, and got ready in two days, so as to be capable of receiving patients. Two of the medical men of the districts did duty, week about, at the hospital; in addition to which there were two gentlemen appointed to act as dispensers (afterwards increased to three), with a complete hospital staff, consisting of hospital-serjeant, steward, surgery-man, orderlies, and nurses. In a short time it was found necessary to establish other places in the neighbourhood of the building, for the purpose of receiving patients convalescent from the cholera, as the hospital itself was not sufficiently large to contain all those who were brought to it. In consequence, two houses at the lower end of George-street were taken, as female convalescent wards, and a large and convenient shed, built on the premises, as a male ward. While speaking of the hospital, it may be as well to remark, that it was found exceedingly difficult to get individuals to act in the capacity of orderlies or nurses, on account of the dread which the disease inspired; those obtained, with a few exceptions, were generally persons of intemperate habits and bad repute. A committee of management for the hospital, with a president, Mr. Turner, who also performed the duties of president of a district, and to whose kindness I am, personally, much indebted, was also formed, having occasionally to act as hospital visitors. As the disease spread in the country parts, similar precautions and sanitary measures were adopted. The hospital and the sick were alternately visited by the clergymen of the island. Measures were

also taken at the general hospital for removing their sick to the cholera establishment, as soon as affected; although, from the want of night-watchers, who might ascertain the attack as soon as it commenced, many were not sent in until nearly moribund.

These were the chief measures resorted to by the Central Board of Health, although others of great importance were subsequently adopted: to wit, the expulsion of great numbers of the poor from the island, the establishment of tents on Gallow's-hill, the adoption of the provisions of the Cholera Act, &c. This latter measure appears to have been followed up in its full force; medical men were compelled to send in reports of cases; and this farce was kept up for some time, such reports being required even from those who had declared that they were not in practice at all; consequently, were obliged daily to report that they had no cholera patients! Indeed, to such a pitch had this spirit at one time arisen, that prosecutions were threatened against a medical man, for refusing to send them in. The Board likewise republished the popular directions drawn up by order of the French government, and these were distributed over the island. As they have appeared in this Journal, the profession at large are enabled to form an opinion on their relative value. A measure, to which I have already alluded, was earnestly and strongly recommended, as likely to conduce materially to the healthy condition of the town of St. Hiliers, and of the island generally;—I mean the expulsion of the English and French poor from the island, and the establishment of tents on Gallow's-hill for the Jersey poor. When this determination was put in practice, the Board was abused for doing so, and petitions presented to the British government, complaining of it, as an act of extreme injustice: and so, at first sight, it really appears to be; but it must be remembered, that it was done under peculiar circumstances; indeed, I am of opinion, that it has not been done sufficiently extensively, for I firmly believe, that until the narrow, close, and thickly-inhabited streets are thoroughly cleared out, the cholera will continue its ravages, either as an epidemic or a sporadic disease. The States may not be justified *legally* in expelling so many persons from the island, and in transporting others from their residences to the tents pitched on the hill; but it is certain that it was a measure of the utmost importance, and had it not been practised, there cannot be a doubt but that the disease would have been more extensive in its ravages, and far more fatal in its effects. Whole families have been swept away by this pestilence, from the grandfather of ninety, to the infant of a year old; entire houses have been cleared out by it; and is it not better that these individuals, *unfortunate* as they are called, should be sent to their own country, and that, too, at the expense of the States, in preference to remaining in the island, to be carried off by a dreadful and a rapid death!

The injury inflicted is not great;—the benefit derived immense. The majority of those attacked were not natives of the island.

It was very difficult to obtain authentic statements concerning the previous history of the malady; but it was apparent that its course was similar to that pursued elsewhere by it. The sloth, the drunkard, and the prostitute, were generally marked out as its victims. In George Street, there are about half a dozen houses at that part nearest the sea, which, at the breaking out of the epidemic, were brothels: those at the upper part being inhabited by a more respectable class. About thirty or forty persons lived in these half dozen houses; they were nearly all attacked, and with one or two exceptions, all died, while but two or three sporadic cases occurred at the upper end of the street. This fact needs no comment. When the cholera broke out, the first cases were exceedingly severe, without any previous symptoms, and comparatively few recoveries were announced. In time, however, its malignity appeared to wear out; milder cases occurred; diarrhoea or other premonitory symptoms existed; and it became evidently more tractable, although, to the last, cases were admitted into the hospital of a most malignant character. It was unfortunate, that here, as elsewhere, the cholera hospital had a very bad name among the poor; the report went, that as soon as a patient was admitted, a coffin was placed by the bed-side. The consequence was, that the poor were unwilling to enter it, until all hope was lost, and then being received and dying there, they swelled out the death-list, and added thus to its ill repute.

The first appearance of the cholera at Jersey was attributed to the importation of infected clothes from Plymouth, but there are in reality no grounds whatever for such a suspicion. I repeat the word *suspicion*, for the most ardent contagionist in the whole island can only say that "*it was supposed that such was the cause*;" and it never has been proved to be the case; indeed it would be an endless task to attempt it. It should be shown that these clothes had been worn by cholera patients—that they were brought from Plymouth by (to keep up the doctrine of contagion) individuals who caught the disease from them,—and that they were sold or otherwise distributed to the persons who were first attacked, namely, those living in Cabot's-yard; nothing of all this has been, and, I believe, no part of it can be, proved; consequently, a jury of impartial and unprejudiced men must return a verdict of "not proven." Besides that, the cases mentioned by Dr. Struvé totally disprove any such statement. The clothes from Plymouth could not have given rise to a disease which already existed in the island; and, I may add, that the evidences of contagion could not be traced in the cases which occurred afterwards. There are only two circumstances which tend to support this doctrine:—the deaths of Messrs. Power and Martin, and se-

veral orderlies and nurses having fallen victims to the pestilence. But for these, evident and palpable causes can be detailed, without having recourse to an absurd and nearly exploded doctrine, especially one which tends to sever the finest feelings of humanity, and which, in its operation, would ruin the commerce of the whole country. Mr. Power, who was the third dispenser at the hospital, had only joined the staff a week, when he was taken ill. On the Sunday previous, he had dined with a friend, and had taken rather too much wine, and, I understand, suffered from the usual consequences the next day. On the Monday evening he had, at the Club, eight or nine rummers of brandy and water, and next day he was taken ill, as the result of such irregular proceedings. He had also committed various debauches in the fields of Venus. I saw him on the Thursday, when he was evidently labouring under hepatic and gastric derangement; on the Friday morning he found himself well enough to go out; but whether he took any thing more than ordinary then or not, I have been unable to learn. He returned in the afternoon, feeling much worse, and laid down; in a short time the symptoms of an exceedingly severe attack of the cholera manifested themselves, and terminated in death on the following morning. During all this time he was residing in the hospital, and, until he went out on the Friday, had not left his bed.

Dr. Martin was a weakly individual, and, at the period of his attack, was labouring under a disease of the chest, said to be consumption, which is hereditary in the family. He died of the sequelæ of cholera, or rather of a worn-out constitution. He attended the cases as district-surgeon, but had, I believe, done duty at the hospital. In regard to the orderlies and nurses, I have already stated that they were intemperate and dissipated, and such were more readily engaged, as two active and attentive superintendents had been obtained, by whom these individuals could be in some measure controlled. They had constant fatigue, were highly fed, drank hard, committed *les excès du table*, neglected their bowels, frequently remained constipated, or "caustic," as they called it, for days together, many of them, also, being afraid of the disease; and, under such circumstances, is it to be wondered at, that they should be attacked, and, being attacked, that several should die? It is really astonishing that more did not fall victims, considering the variety and intensity of the predisposing and exciting causes which were in operation. There can hardly be a doubt but that they would have been seized any where.

From a review of the symptoms of cholera, it would appear that the nervous system is the first acted upon by some poison, the nature of which we are ignorant of, and by the suspension, partial or complete, of the nervous influence, the circulation and the secretions are arrested or greatly impeded. That such is the case, has been clearly demonstrated by Bell and

others; and, from the fact, that the powers of mind in the sufferer are generally perfect to the last, it would appear that it is not the cerebro-spinal system, but rather the tri-splanchnic which is affected. Of this, however, I had no means of judging, other than by the semeiology, as autopsic examinations were not allowed, on account of the prejudices of the populace; and as they would interfere with the carrying into effect of a law that had been recently enacted, that every person dying of cholera should be buried in twenty-four hours.

I shall not occupy your space by a detail of the symptoms, as these must now be known to every student of even a year's standing, having been repeated *uague ad nauseam*, but shall rather proceed to notice one or two peculiarities which occurred under my own eye. It has been generally remarked, that the secretions are suppressed in the algid, or cold stage, of cholera; but the French medical men have placed the non-suppression of the milk on record, and I have met with a case (that of Jane Tobin) in which the menstrual secretion was flowing, and that abundantly, during the cold stage, and this fluid I myself saw, as did also my colleague, Dr. Young; I should not otherwise have believed it, the fact is so extraordinary, in my opinion. Another very curious fact was, that relating to Mrs. Thrash, who was delivered of a living child during the period of collapse. These are instances which do not often occur, and especially claim the attention of the physician. The continuance of the catamenia can only be accounted for by the supposition, that the secretion of the uterus taking place periodically, and the uterus being free from this excitement during a certain period, the poison of the cholera was less able to interrupt its effusion than those to which, occurring constantly, the body is more accustomed: the same explanation, if the right one, will hold good in regard to the lacteous secretion. I have not met, any where, with cases of a nature similar to those which I have now placed on record. It was also rather peculiar, that almost every case that was admitted, in collapse, came in with a very foul and loaded tongue, which continued for several days after, and gradually cleaned as the case improved. When the patients were recovering from the collapse, the watery evacuations gradually changed in colour, became of a black hue, then dark-brown, finally green and yellow. This would be the case when the disease proceeded happily, but when typhoid symptoms set in, then the stools remained dark, and the other characteristics of typhus ensued. When the patients died after recovering from collapse, it was generally from head affection, as the sequence, not the cause of the disease, as an ingenious correspondent assumes it to be. Five cases, however, terminated in delirium tremens, of which two recovered and three proved fatal.

Mr. Bell, in his valuable work on cholera, highly recommends bleeding, and from his

reasoning, I thought well of the plan; but when I received the appointment to the hospital, I was warned by Dr. Lecoq, that the inhabitants of Jersey could not bear even such bleeding as a Londoner could support with ease, in the ordinary maladies, and *à plus forte raison*, not in cholera. From the comparative cheapness with which spirituous and vinous liquors can be obtained there, the lower classes indulge habitually in drinking, several of them taking immense quantities of brandy in the course of the day; and the consequence is, that their families are neglected, filth and misery reign in their habitations, and while they thus so debilitate themselves, as to render it impossible to put the antiphlogistic plan into practice on the extensive scale, which is occasionally necessary, they also fall speedy victims to any epidemic which visits their shores. Such have been very generally the persons who have been attacked by cholera, and have perished. It has rarely happened that individuals of "correct" habits have been seized, although a few cases have taken place; but even then the subject was of a debilitated constitution, or was predisposed by fear. In one case, venesection was largely tried, veins being opened in both arms, but the black, half-dissolved blood, only could be obtained; it appeared to afford relief to the oppression at the chest, but the patient sunk, and I am half inclined to attribute his death to the bleeding; at least, I think it was hastened by it: he was in collapse, I should say, when it was performed. On the whole, I consider, reasoning only from the symptoms (for that was the only case in which I tried it), that bleeding may and will prove highly advantageous before collapse; but when the patient is in that condition, I believe it would be injurious in the extreme; it may be again employed moderately when reaction has set in, to prevent congestion. I regret that the condition in which the cases generally entered the hospital was such as to preclude a fair trial being given to this potent remedy; they were generally admitted in complete collapse, of which the following is a fair example:—

Michael Killaly, *ætat.* 40, a porter at the Central Station, a man much afraid of the disease, and of very intemperate habits, was admitted, September the 21st, at twenty minutes past three P.M. He came in complete collapse; hands, arms, face, lips, legs, and thighs, completely blue; no pulse at the wrist, or carotids; heart beating slowly, and with great difficulty; chest cool, extremities cold; eyes sunk, fixed, and glazed; tongue furred, cold; no spasms at present; extreme thirst; skin of the hands and feet shrivelled; difficulty of breathing extreme, and rapidly increasing; vomiting, and purging of a watery fluid. The state of the heart's action, and the oppression at the chest, here, one would think, would indicate bleeding, but it would have been madness to attempt such a thing; I say attempt, because I do not believe a drop of blood

would flow; in such a case one recognises the futility of the proverbs, "*dum vita est, spes est.*" "*nil desperandum.*" The unfortunate individual died in about an hour after admission.

The treatment generally found most successful in our hospital practice was, stimulants; sinapisms to the spine, epigastrium, and extremities, kept on for an hour or two, with capsicum and ammonia, or brandy and ammonia, with occasionally a little opium, given until reaction took place, with toast and water, or cold water to allay thirst, *in small quantities only*, was the general course, modified according to existing circumstances. I have placed the directions, "in small quantities," in italics, as I am particularly desirous of calling attention to that point. The Central Board of Health, in London, has been much abused, and very unjustly, for that recommendation, on the authority of individuals, who have visited the London Cholera Hospitals, and who aver that there is constant craving for fluid, and that it should be indulged. It is true that there is extreme thirst; but if large quantities of fluid are given, or even so much as an ounce, they are immediately rejected. It was found necessary in the Cholera Hospital at St. Hiliers to give all liquids in very small quantities, and the drinks which were given to allay thirst were administered in that manner; and every five minutes, or oftener, if required. The contrary plan has been much cried up of late, but when reduced to practice has been found ineffectual, at least at St. Hiliers. But, indeed, no one plan of treatment can be laid down to be followed in all cases; the remedies to be given must be adapted to existing circumstances; and hence the folly of trusting to panacea, formulae, and quack remedies, with which every place abounds, and which followed so rapidly in the wake of the cholera at Jersey. The indications appear to be, to relieve congestion, to draw the blood to the surface, to restore the secretions, and then to guard against excessive reaction, and its consequences. Various remedies and plans of treatment have been tried with this view, but a case of collapse, or in the algid condition, is, in my opinion, so utterly hopeless, that I look on every patient recovered from it as, in one sense, a brand snatched from the burning. For this purpose, the hot-air-bath, the vapour-bath, sinapisms, hot sand-bags, stomach-warmers, lint moistened with liquor ammoniæ fortis, dry friction, stimulating frictions on the spine and limbs, hot irons passed over the spine, or linen dipped in liquor ammoniæ and spirits of turpentine, hot turpentine to the abdomen, and warm clothing,—all of these various measures have had a fair trial, either singly or together with others. Neither of the baths have been found very useful in any cases; the vapour bath is decidedly injurious, as the patients are necessarily wetted by the condensing steam, which, collecting in the bed-clothes and rendering them damp, makes it necessary to

change them; thus exposing the patient to a current of cold air, doing more injury than the heat can do good. On that point also I shall make a remark: the spirit air-bath could be applied and kept up for an indefinite length of time; the heat obtained from it could be raised or diminished at pleasure, and yet I cannot say that I ever saw any benefit from it; the pulse in one or two cases rose for an instant or two, but it speedily fell on the removal of the instrument. It was curious enough that while in the bath, and when on introducing my hand I found the heat so intense I could not bear it, the patients have complained that it was too great, but at the same time the body was almost of a cadaverous cold, and the pulse imperceptible; in short, while the patient was suffering from great external heat, it had not produced any other sensible effects. I am inclined, therefore, to believe, that these kind of baths will prove unavailing in a great majority of cases. The other measures which I have mentioned have proved useful in single cases, but I am sorry to say not one (save the poultices) in so many cases as to warrant their recommendation, exclusive of others. The cold water system was freely essayed in the town; but, if I am to judge from the cases sent into the hospital, I should say, decidedly, without success. The saline treatment was tried in one case, in the hospital, apparently with advantage; but, I should add, that the man had been previously roused from the algid condition in which he lay. In treating individual symptoms, my colleague and myself have used various medicines. The hydrocyanic acid has succeeded in a few cases in arresting the vomiting, and in others has entirely failed. I may say the same of the acetate of morphia, which has been tried internally, and by the endermic method; opiate enemata, with Dr. Clanny's plug, have stopped the purging in one or two instances, when, without the plug, and in large quantities (half a pint of fluid), the clyster was instantly returned. Musk and croton oil have been employed, but I cannot speak in their favour.

When the patient is recovering from the cold stage, and the stools were becoming of the black colour I have already alluded to, mercury, in some one or other of its forms, was generally given, at first as a mercurial and purgative, and latterly, chiefly, as a purgative, combined with an aromatic. I do not recollect a single case which terminated fatally, after the mercurial effect was produced; it has been said, that it is folly to trust to such a sign, as patients have been attacked while under salivation; but this I must consider as bad reasoning; patients may get cholera while in a state of ptyalism, because that is merely a secretion going on at the time of the attack, and can no more prevent it, than the secretion of milk or of the catamenia can; but when, after the cold stage, ptyalism is induced, then we have an evidence that the *secretions are restored*, that the mercury is exerting its proper action, and

that the powers of life have sufficiently rallied. Besides, the effect of mercury being thus produced, may and will tend to prevent those affections of the head, which generally terminate life in the consecutive stage. Under such circumstances, I think we are warranted in declaring a patient convalescing from the cold stage, and *salivated*, as out of danger, except such as may arise from accidental imprudence; and the contrary opinion has been formed, in all probability, from regarding the action of mercury as *specific*, and not as a mere counter-irritant, setting up a new action in a different part, and thus getting rid of the prior malady, on the old principle, "*no two diseases can exist at the same time.*"

## A CLINICAL LECTURE

Delivered by

DR. ELLIOTSON,

Friday, October 12th, 1832.

### LECTURE I.

*Rupture of the Aorta—Pathology of Aneurism—Hysteria cured by Depletion—Asthma cured by Lobelia—Acute Dropsy—Vertigo.*

GENTLEMEN,

Just before coming to the Hospital, a gentleman was kind enough to furnish me with an instance of rupture of the aorta, of which I shall speak before proceeding with my general lecture. A young woman, in the seventh month of utero-gestation, was suddenly seized with pain in the neck, chest, and epigastrium, extending to the womb and kidneys. As the pain increased in the womb and kidneys, it diminished in the neck and chest; pulse good. Six hours after the attack, she was bled, and, while in the act of stooping, she suddenly dropped dead. After death, the aorta was found ruptured, and if you look here (*showing the diseased heart and vessels*) you will at once see a good reason for its being ruptured. The left ventricle, you will perceive, is perfectly healthy; after the origin of the aorta, from the left ventricle, you will find it ruptured; the inner and middle coats are lacerated across. In all probability this part of the rupture took place when she was first seized with the pain in her chest, but the blood did not escape at this time; for the internal and middle coats being ruptured, the blood poured through the orifice, and pushed the external coat from them; consequently prevented the blood from escaping further; for the external coat was not ruptured longitudinally but vertically, and gave way from the pressure caused by so great an accumulation of blood, which passed under the pulmonary artery into the pericardium. In the course of five hours, then, the external coat gave way from distension. This is a common although an interesting case.

A similar case is delineated (*showing the*

plates) in Mr. Alcock's plates, which are in this library, therefore you can examine them at your leisure.

Another case was that of a woman who came into this Hospital with pain in the left side of her chest, face, and epigastrium, for which leeches were applied, and she suddenly fell back and died. On examination after death, the aorta was found split in a similar manner. The internal and middle coats first became lacerated, and the rush of blood forced the external from the middle, which at last became so thin, that it was also ruptured. The difference between my case and the one I have been speaking of is this: the external coat of mine was rent horizontally, and the other vertically. The middle and internal coats might have been lacerated for some time, because the blood became coagulated upon the external coat, layer of fibrin formed upon layer, which was entirely deprived of its red particles, and prevented laceration from taking place before. This is the history of true aneurism, and you will at once understand the nature of aneurism from it; there is either dilatation of the three coats, or of the internal and middle coats, and sometimes of one only: by the force of the blood, the external coat is raised from them. In this way every aneurism is formed, either from dilatation of the three coats, or from laceration of the internal and middle coats: when the latter is the case, the fibrin of the blood is found layer upon layer, which strengthens the external coat; this coat becomes much dilated, and at last gives way, as in this case, and the patient dies instantly; then if the internal and middle coats become lacerated, and the external remains entire for a few days, layers of fibrin are successively deposited, and thus aneurism is produced. This drawing (*showing it*) shows you what aneurism is, when the middle and internal coats separate from the external. There is a man in Williams's Ward, whom you saw on going round, with a tumour situated on the left side of the sternum, between the third and fourth ribs. Here I have no doubt the internal and middle coats are ruptured, the force of blood pushing off the external coat of the aorta from them, and thus dilating it; layers of fibrin have taken place, and in this way the large tumour is formed by the external coat, precisely in the same way as those I have spoken to you of, in which the external coat gave way. In him, I have no doubt, this will take place, and he will die suddenly. Aneurism may either take place from accident or from disease.

If aneurism does not arise from a blow, it takes place, what is called, spontaneously; or if from slight accident, the aorta is generally diseased, as in this case. Then we either find the coats become very thin before aneurism takes place, or the coats themselves are diseased. A deposit of caseous matter or bone has taken place in the aorta, or else, as in this case (*pointing to the diseased aorta on the table*), it is studded with white deposits. This causes

the internal and middle coats to crack; then the external, as I have before mentioned, becomes pushed from them, and aneurism is produced.

At my last lecture, I gave you a short account of the cases in my wards, and arranged them according to the diseases,—those of the head together, chest, pelvis, &c., &c.; then, having given you an account of the contents of my wards, I shall, for the future, proceed by giving you an account of those that die or leave the hospital from each of our meetings. Since my last lecture, I have presented seven cases, four of which were men and three women. I will consider them in the order I spoke to you of then, namely, diseases of the head, chest, abdomen, &c. One of the female cases was that of hysteria, a very striking case of that complaint, which did well. Hysteria occurs in women from puberty to the end of their lives; but more frequently in young females from the time of puberty to forty-four or forty-five years of age, when the uterus is in action. We find it occurring more commonly in young subjects than in the aged, because there is more excitability in the former than the latter. This was a young female, aged eighteen, who went to a place of worship, where she heard of the death of Mr. Paas, who was killed, and burnt bit by bit, so minutely described by the preacher, which so much excited her feelings, that she went home, and was suddenly seized with pain in the abdomen, which was very severe, and at first mistaken for enteritis. After this, she was taken with hysterical fits, laughed, cried, and barked. Writers on hysteria say, that when a woman barks, if in the presence of others, it brings on the same complaint, and they imitate one another. I know several medical men who were sent for to a village;—there was a girl that was taken with hysteria, and barked; nearly all the women were taken with the same complaint, and barked in a similar manner; and set up such a howling as to frighten the people in the village. This girl, up to the time of her coming here, complained of great pain of the surface of her body. I found the surface of her body very tender, and from so slight a pressure, that I at once made up my mind as to the nature of the disease. If the pain, on so slight a pressure, had been the result of inflammation, we should have had general disturbance of the whole system. In general, in this disease, we find the tenderness on the anterior surface of the body, on the chest, the abdomen, and I have even seen it in the extremities: but it, in general, is confined to the body. These symptoms frequently lead people into error; but when there is inflammation of the peritonæum, or pleura, in the former the inflammation is seldom so severe as to be so painful from such slight pressure; but when it is, there is always great disturbance of the whole system accompanying it. In the latter, there is not any pain produced, but from severe pressure; but in hysteria the

pain is increased from the least pressure made either upon the abdomen or thorax. In peritonitis, there is always constitutional symptoms with it; and in pleuritis, there is scarcely any pain from pressure on the chest.

This is not the only disease that is produced by terror; for at the present time, in my wards, there is a case of epilepsy, which was produced by the boiling over of a tar copper, the man being nearly suffocated; and in the same ward, another of paralysis agitans, produced by the man's falling into the water. Many other diseases of the nervous system may also be produced by fright. When any of these diseases arise from this cause, your prognosis may generally be favourable. This girl had fits before she came in, accompanied with pain in the head. She had been accustomed to bark when in the fits; and when I requested her to repeat the barking, she said "bow, wow, wow," very prettily (*laughter*), and exactly in the same tone she had previously made it in a fit. The treatment adopted was cupping on the occiput, active purgation, and the cold shower-bath daily, which I did not hesitate to employ, being quite certain, from the symptoms, that there was no inflammation present. She took grt.  $\frac{1}{4}$  of croton oil every day; and for the tenderness about the stomach and chest, I ordered a scruple of croton oil to be rubbed upon them twice, which brought out a thick eruption upon those parts. The cold shower-bath braced her up. She came into Mary's Ward on the 10th of September, and left the hospital on the 11th of October, quite well.

The next case was that of spasmodic asthma, which occurred in a man in Williams's Ward, to whom I gave some of the tincture of lobelia inflata. He was subject to difficulty of breathing; there was a slight chirping sound, together with a sibilous rattle, heard in the chest; respiration heard in every part of the thorax. In that part where the chirping sound was heard merely, there was thickening of the smaller tubes, or an inflammatory state of the mucous membrane lining them. Inflammation sometimes exists without asthma, and the breathing is not much affected. Sudden inflammation may come on, and be relieved by bloodletting. Bleeding might relieve the inflammation, and the spasmodic asthma remain the same; at other times inflammation may exist with the spasmodic asthma, and scarcely be noticed. In this man the difficulty of breathing came on by spasms. I gave ʒj. tinct. lobelia inf. three times a day, which speedily removed the affection when the paroxysm came on; this is the best medicine I have ever tried for this disease. In one case in particular its effects were manifested: it was in a young medical gentleman, who had suffered for a long time from these violent spasms. He had been leeches and put upon a low diet. The dyspnoea sometimes came on so violently that he was obliged to get bled for relief. When I saw him, I begged him to leave off his former treatment, and to take some of the tinct. lobel.

inf. which he took. In a short time afterwards I saw him, when he assured me that it had done him a great deal of good, the paroxysm becoming relieved almost instantly after taking it.

There was a man, a short time ago, in Jacob's Ward of this hospital, who had aneurism of the aorta, which burst into the trachea.\* I gave him some of the lobelia inflat. which made him sick, therefore I left it off. Some people cannot take this medicine; I have seen a few drops produce sickness; but I have no doubt if it was given after a few drops of hydrocyanic acid, the sickness would be allayed.

There is a case of neuralgia in Williams's Ward, produced by cold; he is taking a large dose of the liquor arsenicalis, which was given in small doses, and uses before it a few drops of the hydrocyanic acid. The man left the hospital quite well. He had taken ʒj. of tinct. lobelia three times a day.

The next case was a man who was labouring under acute dropsy; had swelling of the face, abdomen, and legs; the swelling of the face appeared as soon as that of any other part. The dropsy came on suddenly, and was produced by cold from getting wet. He had been bled, which was a proper remedy. He was troubled also with bronchitis; there was a sonorous rattle heard in his chest; his urine was albuminous, which is frequently the case; albuminous urine does not always indicate disease of the kidneys, although in diseased kidneys there is generally albuminous urine. This man was bled to twelve ounces; the blood was buffed and cupped; he was also cupped to twelve ounces, and took ʒss. of the supertartrate of potass daily. If I had given this man tonics, and put him upon a good diet, he would not have got well. When dropsy comes on suddenly, or from wet and cold, it is an inflammatory complaint, and requires active antiphlogistic treatment. This man left the hospital quite well.

The next case was that of vertigo. This comes on sometimes as a symptom of vomiting; also as a symptom of hysteria and paralysis, congestion of the head, and many other diseases. We frequently find this symptom come on among a number of others; but in this case there was nothing but giddiness. These cases, that arise from inflammation, speedily give way to bleeding. There was a man some time ago in the hospital, who complained of nothing but giddiness; he could not walk straight, but rolled about like a drunken man. Venesection was had recourse to, three or four times, and he quickly got well. This man, who had nothing but giddiness, was bled to a pint; in a few days he got perfectly well and left the hospital.

There is another case, gentlemen, which I have presented since our last meeting; but unfortunately in going round I left my notes in

\* This case has already appeared in our pages.—Eds.

one of the wards; but as our time has expired, I will speak of it in my next lecture.

[The diseases were described in this lecture from memory, and therefore not in the order intended by the learned Professor of those of the head, chest, and abdomen, as he had mislaid some of his notes.]

## Reviews.

*Practical Observations in Midwifery, with a Selection of Cases. Part II.*  
By JOHN RAMSBOTHAM, M.D. 8vo.  
London, 1832. Highbly.

WE have not perused a practical work on Obstetricy for a long time which afforded us more interest than the production before us. There is a degree of candour about the author that is highly creditable to him, while his details of numerous cases, successful and unsuccessful, bear the stamp of truth throughout.

Some years ago, Dr. Ramsbotham published Part I. of this work, which was found so valuable as to be reprinted in America; and so highly esteemed by our distinguished correspondent, Professor Dewees, that he declared it to be one of the best practical works, so far as it extended. It was a Clinical Report of difficult obstetric cases, and was a valuable work to those engaged in this branch of practice. Part II., now under notice, is the completion of the author's observations; and his chief object is, to elucidate practical points of difficulty. Among these we find cases illustrative of the practice of Dr. Douglas, of Dublin, in long-impacted shoulder presentations, namely, the diminution of the body by perforation and evisceration of the thoracic and abdominal cavities; an operation which facilitates the flexion of the body, and its expulsion by spontaneous evolution, or extraction by the breech. Dr. Ramsbotham has related several cases showing the practicability and utility of this mode of management. We have repeatedly performed it with success;

and were not a little surprised, a short time since, to hear an experienced, and one of the oldest, obstetricians in London, relate a case which was abandoned to nature by six practitioners, and the woman allowed to perish.

The next point of interest described by our experienced and judicious author is, the separation of the placenta in utero, and its expulsion before the foetal head, with its consequences. The facts narrated in this section corroborate the statements of the older obstetric writers, and will be perused with much interest. Eighteen cases of placental presentation are given.

The observations on the practice in such cases is judicious and excellent. Our author is of opinion, that "before delivery can be attempted with any degree of propriety, the os uteri should be already so far opened, or in such a state of relaxation, as to admit the introduction of the hand without much difficulty. If delivery be attempted very prematurely, that attempt may be defeated by rigidity of the parts; \* \* \* and if the rigidity be overcome, the woman will be made to undergo a greater share of suffering, and will incur some risk of laceration of the parts." Now, it appears to us, after the gravest consideration of placental cases, that the chances are ten to one against success, when we wait for such dilatation of the os uteri as will admit the hand. We have known death occur in cases in which the rigid os uteri was not dilated more than the disc of a shilling; and, according to all obstetric writers, the forcible dilatation would be impracticable. Reflecting much upon such cases, and upon the lamentable fact, that the woman and infant are sacrificed, and upon the dilatability of the uterus at all periods of gestation, we are inclined to entertain the opinion, that it would be much better, and more in accordance with science, to dilate the os uteri gradually, though forcibly, even at the risk of laceration, than allow the destruction of two lives for the want of interference. It is needless to argue,



that laceration of the uterus, however extensive, is not necessarily fatal, as our author and numerous other obstetricians of the highest eminence have attested, as well as ourselves. Sad and ample experience has taught us the difficulties and dangers of placental presentations; and we throw out the above suggestion for the consideration of those whose practical observations enable them to form a correct estimate of its value. We by no means advise forcible dilatation in every case; but those engaged in the practice of obstetrics can find no difficulty in distinguishing the cases in which the operation affords the only chance of success. After the above was written, we observed, in a further part of the valuable work under notice, nearly a reiteration of our sentiments: "If the os uteri be found but little dilated, and be somewhat rigid, it must be carefully and gradually opened with *one* or more fingers, afterwards by the thicker part of the hand, until the entire hand gradually slides within the uterine cavity."

When there is great exhaustion, Dr. Ramsbotham frequently fancied that delivery only expedited the fatal result; and in such cases, he proposes to puncture the membranes through the placenta; but he candidly acknowledges that he has not had an opportunity of trying it since it occurred to his mind. In a case of this description, published in Vol. I. of this Journal, No. 15, it will be found that Dr. Ryan perforated the placenta with the effect of arresting the hæmorrhage, but that the powers of life were so low, it was deemed necessary, in consultation with Dr. Blundell, to perform transfusion. So far as the issue of a single case is valuable, it is in favour of the suggestion of Dr. Ramsbotham, which is, by the by, by no means original. The doctor has observed, that in fatal cases death seemed to be accelerated "by too quick an extraction of the child, and too sudden an evacuation of the uterus." When the hæmorrhage has

ceased, our author thinks it the best practice to leave the expulsion of the fœtus to nature; and not to have recourse to a forced delivery, when the "woman is reduced to the lowest state by the previous flooding." But suppose we leave her in this state, and that flooding again recurs, are we warranted in allowing her to die without artificial aid? We have been consulted in such cases, and waited until the woman rallied from the greatest prostration, until the pulse was only 80; yet after delivery, by the most cautious and dexterous version employed by the attendant, the uterus rapidly dilated, hæmorrhage recurred, transfusion became necessary, but death ensued.

This occurred in the case referred to in vol. i., and was witnessed by Dr. Blundell and Mr. Austin. If the case be left to nature, and flooding recur, when the vital powers are in the lowest state, we should like to know the practice to be employed. Our author seems to agree with us, that it would be preferable to incur the imputation of rashness than of protracted delay. We are much pleased with his remarks of the necessity of proper aid in this class of cases, and of his exposure of the fallacy of those ignorant and stupid fools, who would confide the treatment of such cases to the management of old women, or hospital surgeons, persons as competent to attend such cases as the inmates of Bedlam.

We must pause here for the present, but shall and must resume our review of this truly valuable work in our next number. We have said enough to show our readers the intrinsic value of this production to the practical obstetrician. We can conscientiously recommend it as a valuable addition to the library of every man engaged in the practice of the important branch of medicine of which it treats.

*A Dictionary of Practical Medicine, comprising the General Pathology, the Nature and Treatment of Diseases, Morbid Structures, and the Disorders especially incidental to Climates, to the Sex, and to the different Epochs of Life; with numerous Prescriptions for the Medicines recommended: a Classification of Diseases, according to Pathological Principles; a copious Bibliography, with References; and an Appendix of approved Formulae, the whole forming a Library of Pathology and Practical Medicine, and a Digest of Medical Literature.* By JAMES COPLAND, M.D. 8vo. London, 1832. Longman and Co.

THIS is decidedly the most learned, comprehensive, and valuable Medical Dictionary in our language. It is evidently the production of a physician profoundly acquainted with the medical literature of all countries, and one practically acquainted with the immense class of diseases usually consigned to that order of the profession to which he belongs. We hesitate not to declare, that Copland's Medical Dictionary will have a place in every select library in the kingdom. It evinces the most laborious research, the best arrangement, and the fullest information of any work of the kind in the English language. When complete, it will be the most perfect exposition of the nature and treatment of the diseases consigned to the physician, hitherto published in this country. Such is our decided opinion; but we, by no means, think it a perfect dictionary of medicine. It does not contain an explanation of technical terms, nor a description of the articles of the *materia medica*, nor an explanation of the terms in anatomy, botany, chemistry, mineralogy, obstetrics, pharmacy, physiology, practice of medicine, or surgery, or the various sciences connected with me-

dicine. Here it is inferior to Hooper's Medical Dictionary, the only English work containing an explanation of technology in the medical and collateral sciences, with a valuable account of what are termed medical diseases. As a technical dictionary, Hooper's is superior; as a medical dictionary, in the lowest degree, equal. Both are, therefore, indispensably necessary to the medical practitioner. We have now to describe the intrinsic merits of Copland's Medical Dictionary and the Cyclopædia of Practical Medicine. These works are assuredly rivals. The latter is a compilation, arranged by some of the first physicians in the British dominions, and, therefore, a work of reference and authority. We need not declare, that it ought to be in the library of every medical practitioner in the United Kingdom. But, in our opinion and judgment, it is far inferior to Copland's Dictionary. It wants bibliographical references, research, and comprehensiveness of the exact state of the progression of medicine in the different countries. Some of the articles, written by men of fame, are an absolute disgrace to the medical literature of this kingdom. In this country we possess as able and scientific medical practitioners as in the world, but also a great proportion of men who assume titles without any legal testimonial.

Upon the whole, we are of opinion, that Copland's and Hooper's Medical Dictionaries, as well as the Cyclopædia of Practical Medicine, each possessing peculiar features of great value, will be favourably received by the profession, and be considered works of reference and authority. We may also state, that the Dictionary of Practical Medicine, edited by the most eminent of our Gallic contemporaries, and now publishing in Paris, and translated in this Journal, has been highly esteemed by our numerous readers, and, when complete, will be in the possession of every man engaged in the practice of the healing art. One part of this splendid work, containing 150 pages 8vo, has been

presented to our readers gratuitously, as we print it as an appendix to this periodical, thereby exceeding the quantity of matter given in rival publications.

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CASE OF GREAT DISTRESS.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,  
 IN August last I forwarded a communication to you, through the hands of a friend in London, stating the distressed situation of myself and family from pecuniary difficulties, and asking the favour of your having my distressing case inserted in the work of which you are the editor. Having given you in that letter the full particulars of my unfortunate situation, with references to gentlemen of the first respectability in the medical profession, both at Dorchester and Weymouth, as to my professional character, and also to the respectable gentry of the village in which I reside, as to my moral character, I had hoped, ere this, to have received a favourable communication from you. I trust if you have not as yet inserted the particulars of my former letter, you will do me the favour to do so now on the receipt of this. I have resided in Upway about five years and a half, and for the last three years have been surgeon to five different parishes, but the united salaries of which do not amount but to 31*l.* per annum. Having at present no income but what results from my practice, and having a large family of ten children, nine of whom are at home with me (the eldest I have at home being in her fifteenth year, and the youngest about six months). In consequence of the expenses attendant on the maintenance of so large a family, I have been obliged to contract debts to the amount of about 50*l.* more than my means will meet; and having made my medical friends acquainted with my situation, they have advised my making my case known to you, and to solicit the

favour of your inserting it in the publication of which you are the editor. I have recapitulated part of the contents of my former letter, lest it should have miscarried, or have been mislaid. Trusting to your kind attention to this request,

I remain yours respectfully,  
 S. L. TOWNSEND, Surgeon.

Upway, Dorset, Oct. 9, 1832.

[We declined inserting the first letter, because we have so frequently appealed to the profession on similar occasions, and in general without success. We trust, however, that all fraternal feeling is not as yet annihilated in the breasts of the affluent members of the faculty, and that the lamentable condition of the author of the above letter will excite sympathy and obtain amelioration.—Eds.]

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MILK AS A REMEDY IN ASCITES.

A MEMOIR was presented lately to the Academy of Sciences in Paris, from M. Chrestien, in proof of the efficacy of milk in large quantities in ascites. M. Legrand, who presented the memoir, explained how, in his experience, the most marked proofs of the efficacy of milk had been obtained in two cases, one of which was complicated with hydro-thorax and hydro-pericarditis.

M. BROUSSAIS, who is a candidate for the chair vacant at the Academy of Sciences, by the death of the celebrated Portal, has been lately permitted to read a second memoir before that body, illustrative of his cherished doctrines. Reading memoirs on such an occasion is quite an innovation.

THE admissions and deaths of cholera cases in Paris amount now to two or three daily.

Dr. ROSTAN is appointed physician to the Hôtel Dieu.

THE

**London Medical & Surgical Journal.***Saturday, October 20, 1832.*

## THE CONTAGIOUSNESS OF CHOLERA.

WE call the especial attention of our readers to Professor Magendie's Lecture on Cholera, which will be found in a former page, and which we have exclusively obtained from Paris. This renowned physiologist emphatically declares, that "the notion of cholera being contagious is absurd." The whole of the French physicians and surgeons, connected with the hospitals in Paris, are of the same opinion; while nine-tenths of the profession in this country have long since arrived at this conclusion. The opinion of such a distinguished professor as M. Magendie is more than sufficient to silence the whole of the interested cholera alarmists of this kingdom.

However much the contagionists have injured the interests of our science, and outraged the feelings of humanity, it is consoling to reflect, that, in the event of another epidemic visiting this country, our Public Boards will be more cautious in exposing themselves to the well-merited censure of the public and medical press, and to the contempt of all nations in the civilised world. The recollection of the thousands of human beings whom they have mainly contributed to destroy, by sounding alarm from one corner of the world to the other, as well as those reduced to misery and want—of the injury done

to trade, commerce, and national prosperity in all countries influenced by this—are topics that cannot cease to interest every thinking individual, and excite in his mind the highest disrespect for the profession, which entailed such misery upon society.

## THE CAUSE RAMADGE v. RYAN.

IN reply to several correspondents, we beg to state, that an application to set aside the verdict in this case will be made next term, and on such grounds as will excite no small share of public attention, when published. The decision was so extraordinary and unprecedented, that the whole public press commented upon it; and we have no hesitation in thinking will again have occasion to expatiate on the extraordinary conduct of jurors in civil cases. What could be more remarkable, than a verdict for a farthing on Monday, and a verdict for 400*l.* and costs on Tuesday, for a minor offence, and more especially after the plaintiff had offered to take a verdict for 40*s.* to ensure his costs. Had the second trial terminated as the first, the judges would, most probably, have refused to certify for costs, and hence the offer to take a verdict for 40*s.* It may be said, that it was unfortunate this offer was not accepted; but it was refused on several grounds: first, it was probable that a verdict might be given for the defendant; secondly, the case might be stopped by the court after the preceding decision, and the plaintiff would have to pay his own costs, not only in this case,

but also in the former one. It was the general opinion that the action would be withdrawn, but it proceeded and terminated in a manner that surprised the profession and the public. But it is not finally disposed of; it is yet to be decided whether the verdict will be confirmed. There are unanswerable reasons, as we are advised, why it should not, and these will appear on the first day of November. Some good-natured friends think it a wiser plan on the part of the defendant, to let the present verdict stand; but perhaps were they in his situation they would probably set it aside, if they could. Few, indeed, are of a contrary opinion. Whatever may be the final issue of the case, the defendant has been made the victim of the profession, in whose defence he unconsciously committed himself, without ever intending to depreciate the plaintiff's reputation as a practical physician, for every one knows this would be libellous; but in censuring his conduct in setting up an audacious emperic as the equal, if not the superior of the brightest ornaments of the profession. Had Sir Henry Halford, or any other physician of eminence, played the part of Dr. Ramadge in advocating St. John Long, he would be equally censured for such an unprecedented and unprofessional course.

This was the opinion of the London Medical Society, and of the other eminent individuals, who would prove it, if allowed to do so, at the trial. There is nothing remarkable in this, after all; for any member of this or any of the learned professions, who

chose to violate the etiquette of the faculty to which he belonged, would incur the displeasure of his brethren. Suppose a barrister wrote a letter for a tipstaff of one of the Courts, and maintained that he knew as much about law as all the judges, serjeants, and barristers, would not such a barrister be censured by his profession? Most assuredly he would; and yet it is for an analogous case, that the defendant, in the cause at the head of these remarks, has been subjected to tedious and expensive litigation, to an immense loss of time, and to a fine unprecedented for its excessiveness in the annals of English Courts of Justice.

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IN this number we afford our numerous readers a specimen of the unequalled advantages we offer them, in commencing the publication of such valuable lectures, and of the numerous Hospital Reports, as we now place before them. Our intention is, to publish a London, Dublin, and Paris Course of Lectures, delivered by the most eminent professors in those capitals, together with various lectures of distinguished individuals. Our rivals may defame us as long as they please; but while we can supply the information of such celebrated professors as Cooper, Magendie, Elliotson, and Graves, we can despise their impotent and unprincipled malignity. We are among those who consider the world sufficiently capacious for its inhabitants, and that fair competition and decided superiority are justifiable. Our anxious endea-

your is, to diffuse scientific knowledge; to place in view the progress of the medical sciences in all countries; and if our contemporaries are unable to do so, the fault is not ours. In conclusion, we owe it to ourselves to observe, that we should have published a Course of Lectures delivered at King's College, and at the Edinburgh University, had the professors in the Institutions assented.

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#### NEW PROOFS OF THE FOUL PLAY OF CONTAGIONISTS.

AMONG the many attempts made in this country by a knot of self-condemned contagionists, with their *employés*, to cover the mischief inflicted on humanity by false doctrines, we have seldom, perhaps, seen anything more barefaced than the statement made in a Journal last week, that when practitioners are sent from a distance to a place where cholera prevails, with the object of watching its progress, &c., they are almost invariably contagionists. This is utterly false, as has been amply proved on the Continent, and, indeed, in this country. What, we would ask, has been the nature of the reports made to the Academies, &c., of Paris, by the various distinguished men sent to study the cholera in Russia, in Poland, in Prussia, Austria, &c.?—to a man, we think we may safely assert, *against* contagion. What was the report made to the Academy of Sciences by the illustrious Magendie, when he returned to Paris from his visit to Sunderland?—that the idea of contagion was a mere chimera. And happily was the truth thus honestly declared in France; for anarchy, if not a revolution, would, considering the extent of the explosion in Paris, have infallibly followed the shutting out of the sick from public hospitals, and their total destitution, in many instances, in the way we have wit-

nessed here, as the natural consequences of employing persons who had, by their former conduct, forfeited all claims to confidence on matters of this sort. Has, we would ask, Dr. Hamet, commissioned from this country to Dantzic during the epidemic there,—has *he* warned us against cholera as a contagious disease?—quite the contrary, unfortunately for his own interests, his advancement, honours, &c. This gentleman, indeed, warned the government (and our Consul at Dantzic fully supported him in this) against the fatal consequences to the community of the adoption of measures, founded on a belief in what was shown, under their observation, to have been utterly without foundation. Yes, Dr. Hamet did all this, in a manner highly creditable to his professional integrity; and, therefore, it was that a *clique* intrigued, so as to keep him in the back ground: all which will, no doubt, be brought into full daylight in his book, which, as we lately stated, may be expected to appear forthwith.

We could go on furnishing instances of the fallacy (indeed *intentional falsehood* it must have been) of the observation, to which we alluded at the commencement of these remarks; but shall confine ourselves for the present to the published opinions of an American gentleman,—Dr. Ashbel Smith, who was attached to the service of the Hospital Necker during the greater part of the epidemic in Paris. This gentleman states, in a work just published at New York, that “the cholera is not contagious;” that he considers this “now put beyond controversy;” that his opportunities for observation have been very great, as he collected a vast mass of facts, not one of which “goes to establish the contagiousness of cholera.” He says, that this was, in fact, the only point regarding the disease upon which almost all the medical men of Paris agreed; that the disease appeared there first “in a part of the city least in communication with strangers, and before the

disease existed in any other part of the kingdom:”—finally, instead of telling his government to adopt quarantines, he declares, that “nothing can be expected from quarantine regulations.”

By the extract of a letter from a physician of Philadelphia, published in the No. for the 6th inst. of the *Lancette Française*, we see that there is scarcely a contagionist among the practitioners of that city, or New York; so that it would appear that the honest reports of Dr. Ashbel Smith, as well as of a commission sent to Canada, prevented the faculty in America from being inaccessible to the evidence passing before their eyes; however unavailing any thing of the kind may now be towards dissipating popular prejudices, occasioned there or anywhere else BY THE FALSE DETAILS PROPAGATED FROM THIS COUNTRY BY A PARTY.

That some Italian physicians, who had been at Paris during the cholera, published opinions favourable to contagion, is quite true enough, and the secret of this is, that MM. Pariset and Adouard, two physicians of Paris, who have long, like some of our London medical men, been fattening upon quarantine systems, got up a little coterie in Paris during the epidemic, in the hope of making head against the *élite* of the profession, who had determined to do their duty towards society in a straight-forward way. To this little party a few foreigners only could be induced to attach themselves, and, among others, were Drs. Trompeo and Rolandis, of Turin, who, on their return to Italy, have adduced, in proof of contagion, a story of many persons employed in cleaning mattresses of cholera patients having been attacked with the disease, which has been formally contradicted in the *Lancette Française* of the 6th inst.

## Hospital Reports.

ST. THOMAS'S HOSPITAL.

### DIABETES.

JOHN SHAW, aged 40, admitted into Jacob's Ward, of this hospital, under Dr. Elliotson, a robust man, who had never suffered from illness, until fifteen months since, when he was attacked with his present complaint; for twenty years he has lived very freely, and for the last twelve has habituated himself to drink a large quantity of gin and ale daily; of the former his usual quantity was eighteen to twenty glasses, and of the latter seven pints. At the commencement of his complaint, his skin was hot and dry, mouth also dry and parched, depraved taste, thirst urgent, urine very copious; cold shiverings: these symptoms continued, and, as the disease advanced, so his body decreased. His muscles at the present time are very flaccid. Symptoms are, pain in the loins, course of ureters, and extremities; for the last six months has had numbness of the same, which is much aggravated by cold, disagreeable taste in mouth, which is dry and clammy; voracious appetite and thirst, skin moist: sometimes perspires profusely. States that his thirst has been so urgent, that he has been obliged to drink from the kennel in the street. Tongue very white, countenance rather depressed. Has made thirty pints of urine in twenty-four hours before his admission. At present his urine is of a light colour, and contains much saccharine matter; feels an unpleasant sensation in the stomach after meals; complains of weakness, great aversion to exercise, and loss of power; bowels not open for ten days; breath has a peculiar odour; pulse small, 80.

21. R. *Strychnin* gr.  $\frac{1}{8}$  *ter die*.

Meat twice daily.

24 to 25. Drank 18 pints, and passed 20 pints of urine.

25 to 26. Drank 18 pints, and passed 20 pints of urine.

28. Remains much in the same state. The medicine has not excited any sensible effect; complains of the numbness.

26 to 27. Drank 19 pints, urine 21 pints.

28 to 29. Drank 15 pints, urine 10 pints.

29 to 30. Drank 16 pints, urine 18 pints.

31. Fancies himself a little better, does not perspire so much; still, however, complains of all the symptoms. Has a great wish for bread, which he appears to relish better than any thing else. To have double quantity.

R. *Strychnin* gr.  $\frac{3}{4}$  *ter die*.

30 to 31. Drank 12 pints, urine 12 pints.

31 to Sept. 1. Drank 11 pints, urine 14 pints.

1 to 2. Drank 11 pints, urine 13 pints.

2 to 3. Drank 11 pints, urine 12 pints.

3 to 4. Drank 11 pints, urine 12 pints.

Sept. 4. All the symptoms, except the numbness, have abated, this continues as bad as ever; bowels regular since the use of strychnine.

R. *Strychnin* gr.  $\frac{1}{3}$  *ter in die*.

4 to 5. Drank 11 pints, urine 12 pints.

5 to 6. Drank 11 pints, urine 12 pints.

7 to 8. Drank 11 pints, urine 12 pints.

7. Continues to improve; more power, tongue redder, pains about loins, ureters, and extremities better.

R. *Strychnin* gr.  $\frac{1}{2}$  *ter die*.

12. Improves fast; the numbness, however, remains the same.

R. *Strychnin* gr.  $\frac{3}{4}$  *ter die*.

From 11 to 17. Drank 11 pints, made of urine 12. Meat twice daily, and double allowance of bread continued.

18. Since the 12th has complained of slight giddiness. On Sunday the 16th, these symptoms increased, so much so that he fell down going up

stairs to the ward. Giddiness continues, more some days than others: appetite left him since yesterday, thirst not so urgent, still, however, this symptom continues, feels very weak, with lassitude, tongue not so white, disagreeable taste in mouth, pulse rather hard, 70, numbness worse.

18 to 19. Drank 9 pints, made of urine 10 pints.

19. 10 o'clock P. M. This evening he was taken with a pricking sensation, accompanied with a burning heat over the whole surface of his body; this sensation lasted one hour, during the paroxysm he felt quite stupid.

*Strychnine discontinued.*

22. The poor fellow appears very weak; vomiting came on this morning, which harassed him much; bowels rather confined, feels continually sick, no appetite, thirst diminished, complains of great pain about his abdomen.

19 to 22. Drank 2 quarts a-day, made of urine 3 quarts.

22. *Hyd. submuriat.* ℞j. *statim.* *Magn. sulph.* ℞ij. *singul. dimid. hor. donec alvus soluta fuerit.* V. S. *ad lb. j.*

23. Vomiting continues this morning with purging; has pain from pressure on the abdomen, which appears much distended.

*Cataplas. sinap. amp. abdomini.*

R. *Acid. hydrocyanic* ℞ij. *unct. opii* ℞x. *Sp. ammon. aromat.* ℞j. *ex aqua menth. pip.*

Four o'clock P. M. Bowels much relaxed.

R. *Inf. catechu.* ℞iss. *pro re nata.*

24. Ten o'clock A. M. Vomiting and purging nearly abated; made about two pints of water in the night, which passed involuntarily in bed; weakness excessive, pulse 110, small and quick, countenance anxious, insensible at times.

R. *Sp. ammon. aromat.* ℞j.

*Statim ex aqua menth. pip.*

Has a great wish for some brandy. Seven o'clock P. M.

*Vin. rub.* ℞j. *2da quaque horâ.*

25. Sickness subsided. Has been insensible all night, and thus con-



tinued until two o'clock, when death terminated his sufferings. Had not made any water for twenty-six hours.

*Sectio Cadaveris.*—Upon examining the abdomen, the whole of the intestinal canal was much distended with flatus; it contained, also, a great deal of bilious secretion. The whole of the mucous membrane, from the stomach to the rectum, was very soft, and easily lacerable with the finger. In some parts there were several patches of extravasation, the whole being much injected; liver healthy; kidneys very large, almost double the usual size: rather redder than usual; bladder contracted, and healthy; but the inner coat of the ureters presented a patch of extravasation in the centre. Thoracic contents healthy. A quantity of serous fluid was found between the arachnoid and pia mater; ventricles also distended with fluid, the vessels of arachnoid lining them being much injected; the walls of the ventricles had become softer to a considerable extent than the other parts of the brain. The arachnoid, in some places, had become nearly opaque, and adhered firmly to the pia mater.

#### ANASARCA ET MORBUS CORDIS.

Anne West, aged 66, admitted into May Ward of this hospital, March 29th, 1832, under Dr. Elliotson, affected with general anasarca, especially the lower extremities, which are greatly distended with fluid. States that she first observed these swellings five weeks ago; and before their appearance she was troubled with pains in the limbs. Her general health has been pretty good; complains of no other symptoms. Appetite not very good. In referring to the chest, Dr. Elliotson discovered some sibilous and sonorous rattle; also a loud bellows sound in the region of the left ventricle, at the moment of its contraction.

*F. S. ad 5viiij. Elaterii gr. ½ quotidie.*

April 4. This morning her feet and ankles are inflamed. Cold water to be applied constantly to them.

6. Was not much purged by elaterium.

*Elaterium gr. 1 quotidie.*

9. About 12 o'clock on the preceding night she complained of great pains in the legs, continuing until about seven, when Mr. Stone saw her, and ordered warm fomentations to be applied. Between 8 and 9 in the morning she became speechless, and continued in the same state until a quarter before 12, when she died.

*Sectio Cadaveris.*—There appeared to be some slight inflammation in the smaller ramifications of the bronchial tubes. On examining the heart, the aortic opening was contracted in some degree by bony or cartilaginous formations, below the valves; but the last appeared sound. The arch, indeed the whole of the aorta, was in a morbid state; the inner membrane being partially destroyed and studded with these bony formations. Liver was of a singular form, but healthy. The intestines were remarkably small, scarcely larger than those of a fowl or goose. The brain was not examined.

#### GUY'S HOSPITAL.

*Tuesday, the 16th of October, 1832.*

#### AMPUTATION—EXCISION OF A CHRONIC TUMOUR, AND OF FUNGOUS EXCRESCENCES OF THE TESTIS—LITHOTOMY ON A CHILD.

THE operations last reported are all doing well. This day Mr. Key had three operations: an amputation, a chronic tumour, and removal of fungoid granulations of the right testis. Mr. Morgan cut a child for stone.

Henry Brumwell, æt. 21, had a severe blow on his right testicle about four months ago, which caused him great pain in the loins and in the course of the spermatic cord; much inflammation, which was reduced by cold washes, &c. About two months ago, when all the inflammation and pain had subsided, the testicle (as he states) grew to the upper part of the

scrotum, which burst, and, after discharging some matter, granulations sprung up which could not be kept down, and the skin surrounding the granulations not being healthy, Mr. Key removed the fungoid growth (which was rather larger than a walnut), tied two small vessels, and, placing a small piece of lint, wetted in cold water, over the wound, he was put to bed.

Mary Anne Broomfield, *ætat.* 28, states that she has been a healthy girl. When a child, about eight years old, she hurt her foot in a grating, and from that time she has observed an oval swelling on the instep, which has not troubled her till lately. She came as an out-patient, and had the *emp. amm. c. hyd.* applied to it, which did no good; her health has been suffering lately on account of the pain in the tumour.

The situation of the tumour was over the metatarsal bones of the first and second toe. Mr. Key made an incision, and dissected the tumour out, which was attached to the tendon of the great toe. A vein ran through the tumour, which was partly obliterated by pressure. The tumour was a chronic cellular-membranous tumour, neither encysted nor steatomatous.

Mr. Key next amputated above the knee with a double flap, for a child, *ætat.* 4, for chronic inflammation of the knee-joint. About nine months ago he had a fall and hurt his knee; no notice or attention was paid to it. The child has been very much out of health, and Mr. Key has been giving him

*Ferri carb. gr. v.*  
*Pule. rhei. gr. ij.*

The usual vessels having been taken up, he was removed to bed.

Mr. Morgan operated on a boy for stone. Charles Eaton, *æt.* 4, was brought to the hospital nine months ago, and sounded. A stone was found, but his mother would not consent that he should stay in the hospital. He has all the usual symptoms of stone.

He was brought to the hospital on the 24th of September, and has taken occasional doses of

*Pule. rhei. cal. gr. viij. bis in heb.*

When he came to the hospital, he made very little water, and excessively high coloured. Since taking the powders, his water is more natural, and he makes more of it. The operation lasted two minutes and ten seconds. It was performed in the usual manner; a very large stone.

#### ST. GEORGE'S HOSPITAL.

SURGICAL REMARKS BY MR. HAWKINS.

September 27.

**HYSTERIA — HEMATEMESIS — COMPRESSION OF THE BRAIN—COMPOUND FRACTURE OF THE LEG, WITH COMMUNATED FRACTURE OF THE PATELLA—SIMPLE AND HOUR-GLASS HYDROCELE.**

I SHALL call your attention to-day, gentlemen, to some of the accidents which have been admitted into the hospital during the last week, under my care. The first of these is the woman named Sedgewick, who was admitted at half past one A.M., having at half past nine fallen off a quay into the river; luckily for her, at low water time. When brought into the hospital, she made a great disturbance by her noise, and, on the following day, on visiting her, she complained of great distress and suffering. I examined her, but could detect no fracture of any bone, or any symptom denoting external disorganization. She had violent pain in the head, and had been sick and vomited blood; and on the following day, she was likewise sick again, and had brought up a good deal of greenish fluid from the stomach. I could not detect any cause for all these anomalous symptoms; and eventually I found that they were all referrible to hysteria, which is a very common thing, and is well known to those who are conversant with the symptoms of this multiform disease. The hysterical affection had, as it

were, lain dormant in her system until roused by the shock given to it by the accident of her fall.

The next case is that of a man who had fallen from a high ladder, and pitched on his head on the curb-stone. He was brought to the hospital soon after the accident happened, and was then found to be in the following state:—He was perfectly apoplectic; his breathing was stertorous, from paralysis of the muscles of the throat; the pupils scarcely dilated to the strongest light; was only sensible to pain when pinched; the upper extremities were paralysed, and, of the lower ones, the left leg had lost all power, and the right one was only sensible to involuntary motion. Now, this was evidently a case of compression of the brain, arising from extravasation of blood upon its surface; but, upon examination, neither the house-surgeon or myself could detect any evidence of fractured bone. There was a great quantity of effused blood under the scalp, behind the left ear, but this did not warrant me in trepanning the patient, for I believed that there was a blood-vessel of the brain ruptured under the tunics of the brain, and that there was pressure over the medulla oblongata, causing the paralysis; and therefore, with these views of the case before me, I did not feel myself warranted in applying the trephine to this man. Besides, *nothing was lost by the delay* (?) the man's pulse rose slightly about one o'clock, but not sufficiently, so as to warrant his being bled, and at two o'clock he died. I have said, that it was upon the left side of the head that I could feel the puffy ecchymosed swelling behind the ear; but it was not at this spot that the injury was inflicted upon the brain, but on the opposite side of the head, for the blood-vessels of the brain had been ruptured there evidently by the violence of what the French term the *contrecoup*, and you know that if the brain is injured on the *right side*, that the *left side of the body* will be the one affected by it; and this phy-

siological principle was, as you all saw, fully made out in this case. Upon examining the head after death, there was effusion of blood found under the dura mater upon the brain, at the posterior part of the right lobe of the cerebrum, and at the inferior part of the right lobe of the cerebellum at the same side; and there was also found a fracture of the base of the skull near that spot. There was one remarkable fact connected with this case, that there was no bleeding from the ears, plainly showing (as the post-mortem examination showed) that the injury inflicted was behind the median line formed by the petrous portions of the temporal bones and sphenoid bones.

The next case is one of compound fracture, admitted the day before yesterday. A woman, aged 63, was brought in, having a few hours before fallen from a ladder whilst cleaning some paint; the ladder slipped, and her right leg got in between the steps and broke. Whilst in striving to save herself she struck her left patella, which was broken in two larger portions and several smaller ones. On her admission, there was a compound fracture of the right tibia, about one inch and a half above the ankle-joint, and a simple fracture of the fibula upon a nearly even line with this. The external wound was about an inch in length, and a sharp portion of bone protruded through it; this I took off with a pair of bone forceps, or if these had not been sufficient, I should have used Hey's saw, and by making extension and flexing the knee, so as to relax the gastrocnemius muscle, the bones were easily brought again into contact. I dressed the external wound with lint, for that is better than adhesive plaster in these cases, for the latter, by the moisture of the blood, seldom will stick. I put up the whole limb in one of Assalini's fracture-boxes, which is a very convenient improvement, and, in these cases, of much greater utility than the junks, from the circumstance, that when you use the latter, and want to examine

the limb, you are obliged, in untying the tapes, to take away all support from the limb, and with the fracture-box this inconvenience does not occur. The other leg, where the patella was broken into two larger portions, and several smaller ones, I had put on an inclined plane. The woman's mind was extremely calm, her tongue was clean, and her pulse good. Now a question as to the treatment of this case naturally arises. This woman's age is 63, which is against her; but her mind was so calm, and the system apparently so little disturbed, that I determined upon giving her the chance of going through and bearing up against the suppuration which will ensue from the wound. It is true that in so doing I give up all chance of amputation at any future period being of any use to her, but so very few cases of primary amputation in hospital surgical practice do succeed, that I am determined to give the woman the chance of saving the limb, and the result will be seen in the course of a few days.

[We are very happy to add, that up to the present period this latter patient referred to by Mr. Hawkins, has continued to go on remarkably well, thus fully justifying the correct diagnosis made of the case by Mr. Hawkins.—REP.]

#### HYDROCELE.

— Nimms, admitted Sept. 20, under the care of Mr. Brodie. He states, that thirteen years ago a swelling formed in the right testicle, which has been gradually increasing in size ever since, but more rapidly so within the last twelvemonth, and it has now attained a very large size, and the folds of the prepuce over the glans penis are barely discernible. The man is a gardener by trade, has been much exposed to the vicissitudes of the weather, and much accustomed to the confined air of hot-houses. He has never been in India, though his complexion is quite the sallow one so common to those who have been in that climate. He has evidently vis-

ceral disease; pressure over the region of the liver causes pain, and six weeks ago he had an affection of the kidneys, when he voided blood with his urine, &c. He has now, however, got the better of these symptoms. Mr. Brodie was in the country at the time of his admittance, and Mr. Walker, who saw Mr. Brodie's patients, ordered him

*Pil. hydrarg. gr. v.*

*Pulv. ipecac. ʒgrj. omni nocte sumend.*

**R** *Infus. gentian. c.*

*Aq. menth. piperit. aa ʒvj.*

*Extract taraxaci, ʒss.*

*Potassæ tart. ʒj. tie die sumend.*

Sept. 28. There being two hydroceles in this case, Mr. Walker tapped them both, but injected only the left one, on the supposition that the one injection would excite a sufficient degree of inflammation in both to cure them. The injection remained in ten minutes and the man was sent to bed.

Oct. 1. This day Mr. Brodie saw him, and ordered the one grain of pulv. ipecac. c. to be discontinued, and one grain of calomel to be given in its stead.

5. Hydrocele nearly well; the bowels remain obstinately costive, notwithstanding the one grain of calomel at night and ʒj. of tart. potassæ three times in the day. His visceral affection being his most permanent one, and the surgical disease for which he was admitted going on well, he was transferred to the care of Dr. Hewett.

— Shaughnessey. This man was admitted on the same day as the former patient, under the care of Mr. Brodie, with hydrocele of only one testicle, but that hydrocele being divided by a thickened middle band into two chambers, a superior and an inferior one, forming a very good specimen of what is termed "hour-glass hydrocele." A few days after the man's admission, the inferior chamber of the hydrocele was tapped by Mr. Walker, and the fluid let out of both cavities, but it was not injected. On Mr. Brodie's return to town he saw this patient, and re-

marked to the pupils, who were present, that it was an hour-glass hydrocele, and said, that if that structure band, which divided the hydrocele were allowed to remain, and the hydrocele not cured, that in process of time it would effectually separate the tunica vaginalis into two cavities, and that then a puncture would have to be made in them both, to let out the fluid; whereas now, one puncture in the lower cavity was sufficient to evacuate the fluid from both.

Oct. 11. The water having again accumulated, Mr. Brodie drew it off by a trocar and canula, and injected it, and the man was sent to bed.

12. Going on tolerably well; slight inflammation of the scrotum, for which he was ordered 12 leeches.

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#### CURE OF PHTHISIS PULMONALIS.

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THE following interesting paper is from the pen of Dr. William Stokes, a gentleman whose various contributions on thoracic pathology have already excited considerable attention. Dr. Stokes's work on the Stethoscope is one of the best extant, and his exact diagnosis in the obscure diseases, detailed in the last number of our Dublin contemporary, proves him to be one of the best stethoscopists in this country.

“For a considerable time before I had become familiar with the use of the stethoscope, I felt convinced that pulmonary consumption was more often cured than I had been taught to believe. I had known of so many cases where individuals recovered from all the symptoms of phthisis, that it became probable that all of these cases were not merely bronchitis, but probably, in some instances at least, the effect of tubercular disease of the lung, and I was extremely anxious to meet with cases in which the doubt would be removed by a stethoscopic observation. Within the last three years I have had the good fortune of witnessing several cases, in all of which

the most unequivocal indications of tubercle existed, and in which a recovery, more or less perfect, has occurred. The first to which I shall allude is that of a gentleman of a delicate frame, with light hair and fair skin, who consulted me when he was labouring under symptoms of advanced phthisis, the result of neglected cold. He had had hæmoptysis, pain of the side, severe cough, purulent expectoration, and hectic fever; he was considerably emaciated, but had no diarrhœa, nor were his digestive functions materially altered. His symptoms had been of some months' standing. Percussion elicited a very dull sound, so as to be perceptible to the patient, over the left sub-clavicular region, and here all the signs of a cavity existed. The rest of the thorax sounded clear, with a large sonoro-mucous râle.

“I determined to try the effect of the seton in the neighbourhood of the cavity, and to treat the patient for the bronchitis. Country air and horse exercise were ordered, and the following remedy, which I have found of great utility in many cases of chronic bronchitis, with copious secretion:

R. *Resina Balsam. Copaiva* ʒi.  
*Extract Hyoscimini* gr. xxiv.  
*Sulph. Quinina* gr. xii.  
*ʒi. pil.* xxiv.  
*Capiat* ii. *ter die.*

“These measures were carried into full effect, and I saw my patient in the course of two months. The expectoration was much less copious, and the checking of the secretion was not followed by any increase of pulmonary irritation. The respiration had become healthy over the whole chest, except in the situation of the cavity, where the signs of an abscess still continued. He complained still of harassing cough, which I found I could relieve by an anti-spasmodic mixture of camphor, ether, ammonia, and tincture of valerian. In the course of a year his general health improved decidedly, and at the end of about fifteen months from the commencement of the treatment, all signs of a cavity had disappeared, leaving, in its

situation, nothing but a slight dulness on percussion, and some feebleness of respiration. It is now three years since I first saw this gentleman, whose case at first appeared hopeless. He enjoys very tolerable health, but is subject to attacks of catarrh, which have been sometimes severe, but of which he recovers under ordinary treatment.

“The next case I shall mention is that of a young gentleman of spare habit, with dark hair and eyes, who consulted me in August, 1830. He had suffered during the previous year from an attack of pleuritis, followed by empyema of the right side, of which he had recovered by absorption, and consequent contraction of the side, when he was attacked by cough, hæmoptysis, and pain of the left side. I saw him soon after the supervention of these symptoms, and found that the upper part of the left lung sounded dull, and presented a decidedly tuberculous rale. His respiration was hurried, and pulse quick, and his general appearance that of a patient in a rapid consumption. He had spent the former winter in Guernsey, to which I advised him to return. However, previous to his going thither, he went to the country, and on his way returned to Dublin in a month; he then had a violent hæmoptysis, after which the signs of a tuberculous cavity became unequivocal, and the symptoms greatly aggravated; but there was no diarrhœa, and the functions of the stomach were but little impaired. He returned to Guernsey, and I certainly never expected to see him again. In the June following, however, I was summoned to visit him, and was most agreeably surprised to see him greatly improved in his appearance;—he had gained flesh and strength; and on examination by the stethoscope, I could find no trace of a cavity; he had still some cough, and for some time previously had expectorated calculi, evidently the result of the cretaceous transformation of the tubercle. During the summer he continued to improve. He has now left this country, but my

last accounts of him were, that he was enjoying good health.

“In this case, the chief treatment consisted in keeping up the discharge of an issue, established after the formation of the empyema. I beg to add that, throughout the case, I had the benefit of my friend Mr. Wodward's assistance.

“A Roman Catholic clergyman consulted me, during the last year, for symptoms of phthisis, which, in his zeal to discharge the arduous duties of his profession, he had neglected for several months. He was emaciated to a degree, had severe hectic fever, and presented the signs of an extensive anfractuosa cavity in the upper part of the left lung. His hair and complexion were dark, and no strumous taint existed in his family. In this case, as in those just recorded, the digestive functions had escaped alteration.

“This gentleman was possessed of a strong mind, and insisted on knowing the actual state of his case, of which I felt it my duty to inform him without any equivocation. He then said, ‘My case appears incurable; but, supposing the disease not so far advanced, what would you recommend for the restoration of my health?’ I answered, that I would recommend constant counter-irritation, the giving up of his sacred duties, and the diligent use of horse exercise. Six months after this, he again called on me, so altered for the better, that I did not recognise him, so that he had to introduce himself to me. From being a living skeleton he had become corpulent, and his strength was completely re-established. About two months before this, he had become decidedly better; soon after which, he expectorated a calculus, many of which were subsequently ejected; and after each expectoration of this matter, the patient felt a corresponding improvement. He had followed all my directions to the letter. On examination by the stethoscope, I could find no trace of disease, except a slight feebleness of respiration in the upper part of the left

lung, a circumstance fully explicable by the cicatrization of the abscess.

"I might mention three other cases almost completely analogous to those already described. In all, the phenomena of a cavity existed, and subsequently disappeared, after a lapse of months, with the recovery of the patient.

"On comparing these cases, there appear certain points of resemblance between them, the consideration of which throws light on the question of the curability of consumption. None of these patients, with the exception of the first, presented that general appearance called the strumous diathesis. Their hair, eyes, and complexion were dark; their muscular fibre was originally strong; they presented no marks of external glandular disease; their family was not consumptive; the disease had supervened on an inflammatory attack of the lung; and in none was there diarrhœa, or other signs of gastro-enteric complication. I shall again allude to this last circumstance, as I look on it as one of essential importance.

"Although, perhaps, the division may not be found to stand a critical investigation, yet I think we may separate cases of phthisis into two classes, the constitutional and accidental phthisis. The first, where the tubercular development supervenes, either with or without some precursory irritation in persons strongly predisposed to it from original conformation. In these the disease generally runs a rapid course, invades both lungs, and is commonly complicated with gastro-enteric disease. In the second variety, we meet the disease in persons not of the strumous diathesis, and who have no hereditary disposition to the affection. In them the exciting cause is generally an inflammatory attack of the lung. The disease proceeds slowly, is long confined to one lung, the hectic is slight, and often wanting, and the liability to enteric disease is much less. These are the cases in which it appears to

me rational to hope for a cure, and justifiable to adopt decided measures, even after extensive lesions have been formed in the lung. With a single exception, these were the cases in which I have witnessed a cure, either by cicatrization of the abscess, the cretaceous transformation of the tubercle, or by both of these modes together.

"The influence which gastro-enteric disease exerts in accelerating the fatal termination of phthisis, has been long recognized, but systematic authors have been in error in describing this latter complication as a necessary part of the disease. I feel satisfied, that under a different mode of treatment from that ordinarily employed, this complication would be much less frequently observed, as in numerous instances I have known it to be induced clearly by the use of purgative medicines. If ever there was a case in which we should be cautious in giving medicines of this description, it is in incipient, or threatened phthisis, on account of the great liability that exists to inflammation and ulceration of the digestive tube; yet, in all those cases, which in conformity with the prejudice of the day, are supposed to arise from a disordered state of the stomach—of the digestive apparatus—a depraved state of the biliary organs—atonny of the chylopoietic viscera, &c. &c., a set of terms invented to cloke ignorance, and conveying no single clear idea to the mind, this practice is constantly pursued—a diarrhœa is established, and the digestive apparatus becomes indeed disordered, more from the remedies than the disease. Once the enteritis of phthisis is established, I believe we may look on the case as hopeless, the patient rapidly sinks from the lesion of nutrition; but this is not the sole cause, as numerous stethoscopic observations have satisfied me, that from this period, the tubercular development advances with redoubled rapidity, a circumstance explicable in a certain degree by the sympathetic irritation of the lung.

"There is another case nearly

equally common, where the life of the patient is shortened, and the chance of cure removed, by the same practice. A young female, with symptoms of incipient phthisis, ceases to menstruate. To this, which is the effect and not the cause of the disease, all the symptoms are attributed, and the efforts of the practitioner are directed not to remove the irritation of the lung, but to force the uterine action. Emmenagogues, which in British practice means cathartics, are lavished, and the consequences are such as might be expected from this unphysiological and barbarous practice. The pulmonary disease advances rapidly; first, because it is neglected; secondly, because the lung is stimulated by the enteritis induced by the remedies; diarrhœa sets in, and the delicate and amiable patient dies of a 'galloping consumption.'

"The remedies from which I have seen decided advantage, are few and simple; they may be enumerated as follows:—Long-continued counter-irritation by the tartar-emetie ointment; the use of the seton or issue on some part of the chest; constant exercise; a bland, but nutritious diet; travelling. When there is thirst, anorexia, epigastric pain, or vomiting, tonics and expectorants will do harm. Purgatives must be inhibited, and enemata and the mildest laxatives used when necessary. Wine was not allowed in any of the cases which recovered under my care.

"So long as there is any prospect of cure, we should be extremely cautious in using astringents to check the night perspirations; great injury is done by the faith in specifics, which still disgrace the practice of medicine. Thus I have often seen patients taking large doses of sulphuric acid, when they lay constantly in bed, enveloped in flannel, and breathing the atmosphere of a heated room. By removing the flannel next the skin, and substituting a cotton waistcoat, by bringing these patients into the open air, sponging the chest, and using frequent changes of linen, they will be

really benefited, and the chance of diarrhœa, which is so great from the use of sulphuric acid, will be much diminished.

"In a future communication, I hope to lay before the profession the result of trials of the chlorine inhalation, in cases of phthisis, a mode of treatment so strongly recommended by Couetterau. As yet, I regret to say, I have not been able to verify the statements of this author."

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#### CONTAGIOUSNESS OF CHOLERA.

*To the Editors of the London Medical and Surgical Journal.*

GENTLEMEN,

As you have, on various occasions in the progress of your Journal, asserted, in terms of a positive nature, the non-contagiousness of cholera, permit me to offer to your notice, and to that of your numerous readers, the following remarkable instances of that disease: The cases I subjoin all occurred within a few miles of this town, and so recently as at the commencement of the present month.

Thos. Tomlinson, ætat. 44, a boatman, in pursuing his avocation, on his return from within two or three miles of Gainsborough to Borrowasp, near Derby, arrived by the boat, as usual, at his house in the above-named village, on Sunday, Sept. 30, where his wife and her mother also resided. The day after his arrival (Monday, Oct. 1) he was seized with spasms of the extremities, abdomen, vomiting, and dejections of the usual appearance, with other symptoms denoting the presence of spasmodic cholera. Medical assistance was obtained without delay, within a mile of his home, as well as from Derby, and every effort made use of to avert the fatal result, which each succeeding hour gave assurance was impending over him. He died on the Wednesday following. His wife, who had administered to the wants of her husband during his illness, became ill the day after his death (Thursday) in the same manner, and



died the next day. Her mother, a few hours subsequent to this period, was destined to the same suffering, and died in the night of the Saturday following. The woman who had been engaged to wait upon this case, performed the last offices, as regards the laying her out, &c. about seven o'clock on the Sunday morning. The duties required towards the dead had scarcely terminated, before the probability arose, that another victim to this appalling disease was closely at hand. The nurse sickened, symptoms of cholera followed in rapid succession and increased violence. The medical attendants visited her before noon, but the powers of vitality were fast sinking under the aggravation of her sufferings, and a state of collapse was rapidly approaching. She died within twenty hours from the commencement of the attack. The above is the order in which these unfortunate cases occurred. I do not narrate them as being determinate on the subject of cholera contagion, but as instances which, among others in this neighbourhood, afford sufficient evidence of the propriety of pausing before we assert, or consider for granted, the non-communicability of spasmodic cholera.

THOMAS HARWOOD.

Derby, Oct. 16.

#### BOOKS.

On the Influence of Physical Agents on Life. By W. F. Edwards, M.D. F.R.S., Member of the Royal Academy of Sciences, and Royal Academy of Medicine, of Paris, &c. Translated from the French, by Dr. Hodgkin and Dr. Fisher; to which are added, in Appendix, some Observations on Electricity. By Dr. Edward Poulet and Luke Howard, F.R.S.

On Absorption, and the Uses of the Spleen. By Dr. Hodgkin.

On the Microscopic Characters of the Animal Tissues and Fluids. By J. Lister, F.R.S. and Dr. Hodgkin; and some Notes to the Work of Dr. Edwards. 8vo. pp. 488. London, 1832. Highley.

A Practical Treatise on Cholera, as it appeared in various Parts of the Metropolis. By Alexander Tweedie, M.R.C.S., resident Medical Officer to the City of London Cholera Hos-

pital in Abchurch-lane, and Charles Gaselee, M.R.C.S., Surgeon to the Marshalsea Prison. 8vo. pp. 79. London, 1832. Smith, Elder, and Co.

#### NOTICE TO CORRESPONDENTS.

*A Student and Subscriber* is too pugnacious.

*Eblanesis*.—Professor Graves's Lectures have been received.

*A Student at Bartholomew's*.—The affair is too insignificant for public notice.

*A Medical Student*.—Professor Cooper's course will be published in this Journal.

*An Apprentice*.—It is a great hardship to be examined in Celsus and Gregory; but as lectures were not attended before 1831, it is inevitable. The classical examination ought to take place before the apprenticeship; for it is unjust and tyrannical to reject a candidate for his Latin, who may be well informed as a medical practitioner.

*A Member of the College of Surgeons* has no remedy: such is the happy state of the profession, that a tinker may style himself surgeon in this enlightened kingdom.

*A Dispensary Student*.—It is mere palaver to the general practitioner. Any one acquainted with hospitals and dispensaries is well aware, that the student derives more advantage in the latter.

*A Persecuted General Practitioner*.—We are most unfortunately too well aware of the innumerable instances in which actions or prosecutions, or rather persecutions, are instituted by the Worshipful Company of Apothecaries against practitioners, now engaged in prosecuting their studies, while ignorant chemists are allowed to compound and prescribe with impunity. The attorney to their worship must have fine times of it.

*Euphemism*.—We recognise the bold and nervous style of a quondam preceptor (in 1821), in the communication with which we have been favoured. We regret that it reached us only on Wednesday morning, and too late for this number. It shall of course appear in our next.

Reminiscences of an Army Medical Officer in our next.

*J. C. S.*—Foreign Lectures will not be allowed at the College.

A West-end Hospital and Dispensary Pupil has written so hastily, that several of his sentences are illegible.

List of Subscriptions will be given in our next Number.

# London Medical and Surgical Journal.

No. 39.

SATURDAY, OCTOBER 27, 1832.

Vol. II.

## LECTURES

ON THE

## PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

Delivered at the University of London,

SESSION 1832—1833,

BY

PROFESSOR SAMUEL COOPER.

LECTURE IV, DELIVERED OCT. 10, 1832.

GENTLEMEN,

THE subject, which I wish to bring under your consideration next, is inflammation. When I last had the pleasure of meeting you, I mentioned to you an observation, made by the late Dr. Armstrong, that as soon as a student had gained some correct ideas about the nature of inflammation, and all its effects, and occasional consequences, and then united to such information some acquaintance with the character of a few organic diseases, he might be said to command a bird's-eye view of disease in general. Now, gentlemen, I remind you of this simile, not because it is literally true, but because it must give you a notion of the importance, assigned by that eminent physician, to the study of the phenomena of inflammation.

When a part is affected with redness, swelling, and pain, the state of it is called *inflammation*; a figurative expression, implying a condition, as if the part affected were on fire, or seemed to be so to the patient's feelings.

In a course of lectures on surgery, inflammation is naturally the first subject for consideration, though one of the most difficult to comprehend fully and minutely. It is the key to the understanding of the nature of the generality of other diseases—being connected with them as a cause, a symptom, an effect, or even as a means of cure—hence, it is frequently to be considered rather as a salutary process, than as a disease.

Gentlemen, I will mention a few illustrations of its usefulness, as a mode of cure. Surgeons accomplish the radical cure of hydrocele by letting out the fluid collected in the tunica vaginalis of the testicle, and then exciting inflammation of that membrane by means of a stimulating injection, a seton, or other plans, acting on the same principle. Lymph is effused, and the cavity, in which the water had accumulated, is obliterated. Wens, or encysted tumours, warts, and some other extraneous growths, may be cured by purposely exciting a brisk degree of inflammation in them, when they either undergo a gradual removal, or ulcerate, or slough away. The presence of sufficient inflammation, to produce an effusion of lymph, is useful in promoting the cure of wounds without suppuration, and this in the quickest possible manner, as we see exemplified after the operation for hare-lip.

Gentlemen, that inflammation is often a salutary operation in the animal economy, is proved by its influence in preventing evils, which would occasion either serious or fatal consequences. Let me bring to your notice the following illustrations of its usefulness in preventing dangerous circumstances. We frequently find it giving strength and thickness to serous membranes, when they are the only parts intervening between large collections of matter and the cavities of the chest and belly, into which such abscesses would otherwise pass and occasion perilous consequences. We know, also, that it is of vast service in filling the cavities of the cellular tissue with coagulating lymph, so as to hinder the matter of abscesses from spreading so extensively as would happen without this provident disposition of things. Again, we recognise the utility of inflammation, when it forms a boundary for extraneous bodies, accidentally lodged in the flesh, surrounding them with a kind of cyst, in which they lie a considerable time, excluded, as it were, from the rest of the system and without disturbance of it. Lastly, gentlemen, I may specify, as a proof of the salutary effects of inflammation, its general efficiency in preventing effusion of the contents of the bowels, which, without it, would always follow wounds of those organs,

so as to bring on fatal inflammation of the peritoneum. Here it has a most desirable effect, either by gluing the wounded bowel to the neighbouring ones, so as to hinder effusion of the fecal matter, or to the part of the peritoneum close to the inner orifice of the wound in the parietes of the abdomen, so that whatever matter escapes from the intestine does not pass into the cavity of the belly, where it would cause a rapid and often fatal inflammation, but is transmitted outwards, through the external wound itself.

Inflammation is only to be regarded as a salutary process, when moderate in degree; for, if it occur with violence, many severe and dangerous consequences may follow, as will be explained in due time.

Inflammation is generally defined to be an increased action of the arteries, attended with redness, swelling, increased heat, pain, and sometimes throbbing in the part affected. In addition to these symptoms, we frequently observe tension, induration, loss, or diminution of transparency, and other changes, which will be hereafter more particularly considered.

The term inflammation is often employed rather vaguely, and seldom with a sufficiently precise meaning attached to it, with reference either to the symptoms which denote it, or the changes in the part which are characteristic of it, or its intimate nature. Hence, one distinguished pathologist, Professor Andral, is inclined to reject the term inflammation altogether, because it is the expression of a complex process, involving several others, the dependence of which upon it is neither necessary nor constant. Nothing, in fact, is more difficult than to offer an unobjectionable definition of inflammation.

The expression, increased action of the arteries, is rather vague, when employed without any further explanation of its meaning; but this is a point to which we shall more conveniently devote attention, when we have advanced further into the subject.

The rest of the definition seems to me only applicable to certain forms of inflammation; for one or more of the symptoms enumerated in it may be absent. Thus, gentlemen, in the efflorescence, or superficial redness of the skin, termed *erythema*, you will perceive no swelling, tension, or throbbing accompanying the red blush seen upon the integuments.

On the other hand, in *chronic* inflammation, or the slow varieties of this affection, you will frequently notice considerable swelling, but never any heat or throbbing, and sometimes neither pain nor redness.

Redness, though a common effect of inflammation, is far from being one of its essential characters; for, notwithstanding the size and function of the minute arteries may be altered, their dilatation may not be such as will enable them to receive the red globules. This is exemplified in inflammation of the arachnoid coat of the brain, and in slight inflammation of the cornea. Such absence of redness, how-

ever, is principally remarked in chronic inflammation.

Then, gentlemen, you should understand, that inflammation is a process liable to considerable differences in its character and effects. These varieties chiefly depend upon the nature of the exciting cause; upon the state of the constitution; upon the patient's age; and upon the situation, structure, and functions of the part affected.

The differences, dependent upon the kind of exciting cause, we find illustrated

a. In the influence produced by morbid poisons.

Each gives rise to an inflammation of a specific character, regulated by certain laws or principles, which are not manifested in any other instance of this affection.

b. In the peculiarities of the inflammation, ulceration, and gangrenous complaints of the fingers, toes, and other extreme parts of the body, arising from exposure to cold, and well known by the name of *chilblains*. These peculiarities are such as to demand treatment not at all suited to the generality of other inflammations.

The influence of the state of the constitution in determining the kind of inflammation is well illustrated in the history of

- a. Scrofula;
- b. Erysipelas;
- c. Scurvy;
- d. And the disease called *carbuncle*.

Several important divisions of inflammation, gentlemen, are recognized by all medical practitioners.

1. The first, and as useful and well-founded a distinction as any proposed, is that into *acute* and *chronic*;
2. The second is into *healthy* and *unhealthy* inflammation;
3. The third into *simple* and *complicated*;
4. And another into *idiopathic* and *sympathetic*.

*Acute inflammation* produces all its effects quickly; if it is to recede, it generally does so in a few days; if it is to produce an abscess, a similar space of time brings about the event.

The *varieties* of acute inflammation are numerous, comprehending not only every instance of healthy inflammation, but many other cases justly regarded as unhealthy, or complicated.

*Chronic* inflammation signifies that which is slow in its progress, and of a more or less indolent nature, being frequently accompanied by little or no pain, and no perceptible increase in the temperature of the part affected; and often no redness.

In many instances, it begins with so little disturbance, that its origin is completely overlooked.

To this progress of chronic inflammation, it is not unusual to refer all the slow thickenings of various textures, and even the formation of several descriptions of indolent tumours.

It seems to me, however, that the latter doctrine is carried too far, inasmuch as it is sometimes extended to organic diseases and new formations, between which and the simple effects of chronic inflammation—the mere thickening of parts—or their ulceration, there must exist some essential differences.

Gentlemen, one striking illustration of the nature and consequences of chronic inflammation is afforded in the ravages of scrofula, one of the most common diseases met with in this climate. I would not have you suppose, however, that all the inflammation, exemplified in scrofulous diseases, is of a chronic nature; for sometimes it assumes a very acute form; but you will find that the generality of scrofulous inflammations are more or less indolent.

Gentlemen, we may say, *healthy inflammation* signifies that form of the complaint which is not modified by, nor at all under the influence of, any particular disease in the part or constitution. Hence it does not evince any of those dispositions and peculiarities which accompany erysipelas, the venereal disease, carbuncular inflammation, or that which arises from cow-pox, small-pox, or any other specific disease.

Healthy inflammation, near the surface of the body, often receives the name of *phlegmon*, or *phlegmonous inflammation*, which, by some writers and lecturers, indeed, is defined to be common inflammation of the cellular membrane. This was the view taken of it by Dr. Carmichael Smith. But, certainly, it is not restricted to this texture, as we see that the cutis, fasciæ, and other organs may be affected by it, and even be destroyed by it, when its violence goes beyond a certain degree.

With respect to *unhealthy inflammation*, it may be defined to be that form of the complaint whose appearances, progress, and termination, are under the influence of some specific or determinate disease in the parts affected, or the system at large.

Its *varieties* may be said to be as numberless as diseases themselves: venereal, scrofulous, gouty, rheumatic, scorbutic, erysipelatos, carbuncular, &c.

*Simple inflammation* means not only that the process is of a healthy character, but unconnected with any complicated mischief—does not surround any cancerous or medullary tumour—is not kept up by the lodgment of any extraneous substances, or any dead portions of bone, which cannot be immediately removed.

When these, or any other analogous circumstances, attend the inflammation, it is said to be *complicated*.

When inflammation is brought on by any causes which act directly on the part, it is said to be *idiopathic* or *primary*; but when it proceeds from some disturbance in another part of the system, or from any cause not immediately in the seat of the local affection itself, and preceding it, the inflammation is called *sympathetic*, or *secondary*.

Gentlemen, these latter distinctions are highly important in practice, because the cure of a sympathetic, or secondary inflammation, depends very essentially upon quieting the primary disorder, or disturbance, operating as an exciting cause, and often remotely situated from the inflammation itself.

In inflammation, we may often notice four remarkable effects:—

1. Adhesion of parts to one another.
2. Suppuration; or the production of a peculiar fluid, called pus.
3. Ulceration, or the removal of portions of various textures back into the system, so as to leave an open chasm, or broken surface in them, from which pus is generally soon secreted.
4. The death of them, expressed, with reference to the soft parts, by the terms *mortification* and *gangrene*; and, with reference to the bones, by the word *necrosis*.

Mr. Hunter's views of inflammation were particularly directed to this process in its *adhesive*, *suppurative*, *ulcerative*, and *gangrenous* stages, and he certainly conducted the inquiry in the very luminous, original, and philosophical manner, which characterised all his investigations.

Every sort of inflammation has not an equal tendency to each of these stages, or consequences. That attending boils and whitlows is remarkable for its propensity to suppurate; that attending carbuncles, the malignant pustule, the severe kinds of erysipelas, the bites of certain snakes, and pricks in dissection, for its disposition to produce gangrene of the cellular membrane.

Certain inflammations rarely or never bring on either abscesses, ulceration, or sloughing. This may be said to be the case with the inflammatory swelling, well known by the name of mumps, and also with the inflammation peculiar to gout and rheumatism.

Gentlemen, I deem it a fact worthy of your recollection, that whether the inflammation of parts is to be followed by adhesions, suppuration, ulceration, or mortification, will often be considerably influenced by two circumstances, namely, the nature of the structure affected, and its remote or near situation to the surface of the body. This is a principle which was first well explained by the celebrated John Hunter.

As illustrations of it, we may notice, that in the cellular tissue, in all the circumscribed cavities of the body, in all deeply-seated organs, and in those membranes which are called serous, the adhesive inflammation more readily takes place than either suppuration, ulceration, or modification.

On the other hand, nearness to the surface of the body and the texture of a mucous membrane, give a decided disposition to suppuration and ulceration. This is illustrated by what happens in the progress of extraneous substances from deep to superficial situations; as long as they lie deeply, they often create

no tendency to suppuration; but directly they get near the skin, they excite inflammation, and an abscess follows, which, by bursting, forms an outlet for them. Slight inflammation of the mucous membrane of the urethra brings on a discharge of matter, but violent inflammation is requisite to produce adhesions in this texture. Generally speaking, when the inflammation is described as being *suppurative*, you are not to understand that it is exclusively so, or not accompanied with the adhesive in a greater or less degree; in fact, we often see adhesive, suppurative, ulcerative inflammation, and gangrenous mischief, blended together in one disease. As for abscesses, they may be said to be constantly attended with more or less adhesive inflammation at their circumference.

Gentlemen, you will find that in parts of inferior vascularity and powers of life, sloughing and ulceration are readily excited. This fact is illustrated

- a. In the mortification of tendons and fasciæ.
- b. In caries and necrosis of bones.
- c. In the greater frequency of ulceration and mortification of the feet and legs, on account of their distance from the source of the circulation, than of the upper extremities.
- d. In the disposition of new-formed parts to ulcerate and slough, when attacked with inflammation; for they are known to be weaker than original ones, and less capable of bearing inflammation and disease, without ill consequences.

Every inflammation of much extent or violence, or affecting parts of high importance in the animal economy, is attended with a general disturbance of the whole constitution, called by practitioners the *sympathetic*, or *symptomatic inflammatory fever*. The symptoms are generally of the following kind:—

Pulse frequent, strong, and full; secretions for the most part diminished, or suppressed; hence dryness and heat of the skin, a parched state of the mouth and fauces, and oppressive thirst; urine scanty and high coloured; bowels confined; appetite lost.

Not only are the sanguiferous and digestive systems disturbed, the nervous is also disordered. The patient is anxious, restless, and sleepless; suffers headache; and is sometimes affected with twitches of the muscles, wandering of the intellect, and delirium.

This fever is an illustration of what Mr. Hunter used to call an *universal* sympathy of the whole body with the disturbed condition of a part of it.

Gentlemen, the symptoms of the preceding fever are always modified by the extent and violence of the inflammation, and its situation in common parts, or in others of the first-rate importance to life. According to Mr. Hunter, when the latter are affected, the pulse is quicker and weaker than when skin, muscle, cellular membrane, or any other ordinary parts are inflamed.

The symptoms are also modified by the

nature of the constitution, in which the inflammation has occurred. Hence, the sympathetic fever rises to a greater height, the pulse is quicker and weaker, and the nervous disorder more strongly manifested, in irritable subjects, and females, than in other individuals. Fat persons, who are not in the habit of taking exercise, bear inflammation, as well as disease in general, but very indifferently; and hence, in them, the sympathetic inflammatory fever often prevails with extraordinary severity.

But, there is a particularly irritable temperament, frequently accompanying a countenance, in which the cheeks exhibit a peculiar ruddiness, terminating almost abruptly at its circumference. In it minute vessels may be seen ramifying more distinctly, than in the fine complexion of youth and health.

Individuals presenting these appearances frequently bear disease badly; and inflammation, in particular, is in them much disposed to take an unfavourable course, and to be attended with constitutional disturbance of unusual severity. The fever is sometimes attended, indeed, with spasm of the muscles, delirium, and a great deal of danger.

Gentlemen, after having been informed that diseases are not restricted in their consequences to changes in the solids, but that alterations occur in the fluids likewise, you will not be surprised to hear, that the effects of inflammation extend to the blood itself. In truth, its natural qualities undergo considerable and manifest alterations. Thus, when it is taken from the vein of a person labouring under an attack of inflammation, it coagulates in the basin more slowly and firmly than usual; and when the coagulation is completed, a stratum of fibrine, of a yellowish buff colour, or very similar in appearance to glue, and of greater or less consistence, is left upon the surface of the crassamentum, which itself floats in an extraordinary quantity of serum. This yellow substance, like glue, left upon the surface of the crassamentum, is termed the *inflammatory crust*, or *buffy coat*. It is a circumstance which merits your particular consideration; and I shall, therefore, make some further observations upon it at our next meeting.

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NOTES FROM THE INTERESTING  
LECTURES OF  
PROFESSOR MAGENDIE,  
ON CHOLERA.

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In a state of health the dilation of the ventricles has been shown by Dr. M. to be accompanied by a distinct, or full sound, (*bruit clair*), while a dull (*sour*) sound accompanies their contraction; the true cause of these sounds being that the heart itself strikes against the chest with its point, during the bruit sound, and with a portion of its general surface during

the bruit clair. In the advanced stage of cholera the last only can be heard, and as the symptoms become more intense, neither sounds can be detected, even by the stethoscope. Contraction of the ventricles may still, however, exist, to a certain extent, and circulation in the large vessels, in the neighbourhood, may be maintained, though in an irregular manner; a sort of floating of the blood, sometimes, in the artery, rather than regular impulsion.

Of whatever part we speak, stagnation of the blood is of much more frequent occurrence than congestion in this disease; and the distinction is important, as, in the former, there is an absence of arterial impulse. In the algid period, congestion in a part is indeed scarcely possible.

The diminution of heat is a physical effect of the diminished vigour of the action of the heart, and is not so observable about the centre of the arterial system.

The viscid moisture, observed on the surface, in extreme cases, is to be considered as merely an exudation, and not the result of a special vital action.

In place of gangrene being common in cholera, as, from the long suspended secretion in parts, people might be induced to think would take place, it seems extremely rare. Of 300 cases, under Dr. M., at the Hôtel Dieu, it only took place in one. No explanation of this can be offered. In the case at Hôtel Dieu, the patient had portions of the fingers in a state resembling senile gangrene. At the Hospital St. Louis the point of the nose became gangrenous in a cholera patient.

*“L'état cadavérique est, dans quelque cas, plus prononcé chez un cholérique que dans le cadavre lui-même.”*

Besides the usual changes, noticed by authors, in the countenance of the patient, a most remarkable alteration takes place sometimes in the opaque cornea, which becomes more or less transparent, dry, and rendering the visage hideous. The shrunken state of the organ demonstrates the interruption to the circulation, and the evaporation of a portion of its aqueous parts. The lids, in those cases, remaining open, constantly ceased to furnish the globe with the natural secretion. Such an appearance has been only observed previously in dissecting rooms, several days after the death of persons.

Dr. Magendie repeats his inability to explain, satisfactorily, the occurrence of cramps in cholera, and which may take place with or without suspended circulation.

In one instance of a female, Dr. M., with others, remained for two hours near the patient, without being able to discover, by the stethoscope, &c., pulsation in any of the chief arteries; yet, in this case, the woman was able to rise up, to take her drinking-glass in her hand, and to speak.

The nature of the discharges from the stomach and bowels, in cholera spasmodica, differs from those of all known maladies. This

fluid, instead of a feculent, has an *intestinal* odour. If the existence of gas be indicated, on feeling the abdomen of a cholera patient, it may be considered as indicative of a favourable change, especially if accompanied with the particular odour of the healthy state.

Berzelius has remarked, that an acid can, in the healthy state, be detected in all the secretions, having external communication; as the secretion from the intestines, the urine, perspiration, milk; while the interior secretions are alkaline: in cholera patients, the intestinal secretions become alkaline. Chemists have also detected albumen and mucus, or fibrine; these two substances Dr. M. believing not easily distinguishable by tests. The salts, contained in the serous part, are considered as corresponding in their nature with those found in the blood.

A layer of opaque diffuent mucus, on the surface of the alimentary canal, has been noticed; but as this secretion has been noticed also in the autopsies of persons, who had been suddenly deprived of life by accidents, &c., much importance should not, perhaps, be attached to it. If this mucus be taken away by the scalpel from a portion of the membrane, the latter will, in four or five hours after, be again covered with another layer.

The liquid thrown out by the intestines is not always such as has been described (appearance of rice water), being sometimes tinged red, and in other cases it is found to be dark; in other cases, again, it resembles the washings of meat.

Dr. Magendie ridicules the idea of this fluid being the product of inflammation or irritation of the intestinal mucous membrane; thinks it *probable* that it is not secreted from the mucous surface of the stomach; is led to believe, in consequence of his ineffectual endeavours to discover, in some cases of collapse, the pulsations of the ventral aorta, that a total suspension of circulation in the abdomen, as well as in the extremities, takes place, and hence, probably, the prodigious discharge of fluid from the veins, and not from the arteries. The manner in which the mesenteric veins minutely ramify, so as to form numberless villositities on the mucous surface of the intestines, is highly favourable to this view. It must be granted that the whole of the phenomena connected with the intestinal secretion in cholera do not admit of a satisfactory explanation:—is confident, however, that the mucous follicles have but a limited share in the production of the discharge. Dr. Magendie has, indeed, often been unable to detect the development of the glands of Brunner or Peyer. Besides, they are observed to be enlarged in other diseases, especially in scarlatina.

There is a striking analogy between the appearances which present themselves in the intestines of persons suddenly deprived of life by violence, and those to be found in the intestines of persons carried off quickly by cholera: viewed externally no difference is to be

observed. In protracted forms of the disease, the intestines become reddened; so that those not greatly versed in observations of this kind may be induced to believe that inflammation existed, but which, nevertheless, only proves to have been a state of congestion. In inflammation of a part, the communication between veins and arteries ceases, in consequence of alteration in the tissue of the connecting tubes; but this is not the case respecting cholera, in which the redness can be made disappear by injecting water into an artery belonging to the portion of intestine in which it exists.

With respect to the power of absorption possessed, during the algid stage, by the alimentary canal, there seems reason to suppose, from experiments made by Dr. M. that it does usually take place *while pulsation can be detected in the principal arteries*; but, in stages beyond this, there seems reason to suppose that absorption of liquids by the veins, in the usual manner, ceases.

The chyloferous system is always found without lesion, though invariably free from a trace of chyle.

In examinations after death by cholera, the most perfect integrity of the lungs has been found. Water injected into the pulmonary artery, has passed freely into the pulmonary vein. By observations made on the colour of blood drawn from the arteries of cholera patients, it appears to be established, that the natural change of colour does not take place in the blood in its passage through the lungs; though it has been observed to brighten on exposure to air in a vessel. MM. Leroy and Bareul of Paris, having examined air breathed by cholera patients, have found it unaltered in its properties. This part of the subject seems however to require farther attention.

Dr. Magendie, as well as those who attended the patients with him, often inhaled the breath of cholera patients without having experienced any ill effects.

In the algid state, the respiration of the patient is sometimes natural in number and fullness of movements; while, at other times, there is extreme rapidity, with efforts, and convulsions in the muscles of respiration. Where the latter takes place, the prognostic is most unfavourable. It has been fully ascertained that this disturbance in the respiration is not occasioned by obstruction to the passage of the air to the remotest ramifications. This violent action of the lungs has produced emphysema of the pulmonary lobules, where death has been protracted.

(To be continued.)

## A LECTURE ON THE PHYSIOLOGY OF THE NERVOUS SYSTEM,

DELIVERED BY  
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GENTLEMEN,

IN conformity with the plan I have adopted for the ensuing course of lectures, I shall commence with the physiology of the nervous system. It is well known, and you all are familiar with the fact, that upon the nerves depend sensation and motion. If a nerve be cut, the parts it supplies cease to feel, and can no longer be moved; and the same thing happens if a nerve be tied or compressed.

The texture of the nervous substance exhibits no marks of superior organization, affords no indication of the wonderful properties just mentioned, properties we could scarcely believe it exclusively possessed, were not the proofs so easy and convincing. Were the power of receiving and transmitting impressions, shared in common by every part of the body, it would, perhaps, excite less surprise, and this property would be ranked among the numerous results of vitality, among the mysterious qualities conferred by life upon matter; but when we find particular cords appropriated to the discharge of this function, when we observe that we can with facility, trace and insulate, from the rest of the living mass, the very filaments which convey intelligence to and from, and as it were commune with the mind, we at once perceive a special physical agency which converts our general admiration into the conviction, that the nervous influence depends upon a peculiar arrangement of matter.

But here we become at once aware of the weakness of our intellects, and, at this stage of the inquiry, we must pause, arrested by the curious fact, that this most wonderful of all functions is carried on by means of materials comparatively gross, for many other tissues are more highly animalized in their chemical composition, and several exhibit, to our feeble senses, marks of more complicated and more delicate construction. Is there a part in the body that seems to approach, in its palpable qualities, so closely to an unorganized mass, as the matter of the brain? Can any thing appear more homogeneous, more unwrought, more uninteresting in its structure than the cerebral substance? Can any thing be apparently worse adapted for supporting the connexion between mind and matter? I say apparently, for did we possess faculties capable of penetrating the secrets of nature, we could be at no loss to discover the adaptation of the means to the end, and every circumstance connected with the organization of the brain; its chemical

composition, consistency, texture, and other physical qualities would, no doubt, be as explicable as why bone is made hard, ligaments tough, and the intervertebral substance elastic; but, as our senses and intellect are at present constituted, the nature of the principle of life itself is not more inscrutably involved in darkness, than is the structure of the brain considered as an organ of perception and volition.

But because, to use an expression of Locke's, we can neither understand how matter can be capable of thinking, or how an immaterial thinking being can possibly be connected with matter; are we, therefore, to desist from studying the laws which regulate the nervous system, so far as they come within the cognizance of our senses? Certainly not; and, proceeding in this inquiry, we shall find, that here, as in other departments of science, what is useful terminates where what is unattainable commences; for it may be regarded as established, that nothing conducive to the well-being of man has been placed beyond his reach, provided he use sufficient perseverance and industry to attain it.

The fact, that the division of a nerve destroys the sensibility of the parts below the place of division, while the parts above and nearer to the brain retain their sensibility uninjured, proves beyond all doubt, that the sentient principle, that which perceives, is resident neither in the nervous ramifications nor their trunks; for if it were, sensation would not be destroyed by mere section, nor would insulation of a portion of the nerve, and its separation from the brain, prevent it from retaining its power of perception.

That the spinal marrow is not the immediate seat of perception is proved exactly as in the case of the nervous trunks; for when the spinal cord is divided, feeling ceases in the parts below the division, but remains in those above it. As the same remark applies to every part of all the nerves, and to every portion of the spinal marrow, it follows that the powers of perception, or of volition, are not resident in either. Now, as perception and volition are evidently functions of the nervous system, we must look for the organ on which they more particularly depend, in that portion of the nervous system of which we have not yet spoken. I mean the contents of the cranium, including the medulla oblongata, brain, and cerebellum. In some of these separately, or in all conjointly, must these faculties reside.

So far, gentlemen, we have proceeded in this investigation without difficulty, our conclusions being drawn from unobjectionable experiments, easily made, and not involving conditions liable to confuse the results. But, say the objectors to such experiments, in order to solve the present question, what are we to do, for we cannot divide or remove portions of the brain, without, at the same time, inflicting such an injury on all the vital functions of the animal, as renders us unable to determine with precision what functions have been destroyed?

This objection is rather plausible than substantial; for there are certain mammalia, particularly when just born, in which considerable portions of the brain and cerebellum can be removed with facility, and, so far as regards the general functions essential to life, almost with impunity. In birds, too, life may be preserved by proper care, not only for days, but even weeks, after the removal of very large portions of the encephalic mass; and the same observation applies, with still greater force, to reptiles. It is not denied, that such experiments require peculiar attention, and are accompanied by numerous difficulties: but, nevertheless, when conducted with proper precaution and judgment, they have led to very important conclusions, supported by observations made on monsters, and by deductions derived from comparative anatomy. Flourens has made many experiments on this subject, and speaks very confidently of having proved, that the cerebellum has nothing to do with the faculty of sensation, no more than the spinal marrow or nerves. He says, that when the cerebellum is removed, the animal does not appear to lose the power of perceiving impressions made by irritating the nerves of the extremities and other parts; and in this he is confirmed by the experiments of Magendie himself,—experiments we can place the most implicit reliance on, because, as is well remarked by Lund, they lead to conclusions altogether opposed to Magendie's favourite theory, that the anterior portions of the spinal marrow are destined for motion, and the posterior for sensation; for it unluckily happens that the posterior portions of the spinal cord, which, according to Magendie and Bell, serve for sensation, are exactly the portions of the spinal marrow which are continuous with the cerebellum, and yet the cerebellum may be removed without destroying sensation! This is scarcely reconcilable with Magendie's hypothesis; or rather, this fact alone is nearly sufficient to prove that it is destitute of foundation.

The cerebellum, then, cannot, any more than the nerves or spinal marrow, be regarded as the seat of perception. Let us next consider this question with regard to the brain itself.

In the first place, it is well known, that the brain is itself destitute of feeling. In the operations rendered necessary by disease or accident, portions of cerebral matter have been removed, without causing pain or any feeling whatsoever; and numerous experiments prove that it may be perforated by a nail, or removed, slice by slice with a knife, without the least perception of the injury on the part of the animal operated on. This fact, apparently so paradoxical, is nevertheless well established, and is now generally acknowledged. But to this it may be fairly answered, that although the brain itself perceives not impressions made directly on its *own substance*, it may still be calculated to receive the notices conveyed to it by the nerves and spinal cord, and so may be the *seat of perception*.



The latest and most extensive series of experiments made on this subject are those of my friend Dr. Bouillard of Paris, and which experiments were verified by Magendie, and, to a certain extent, are confirmed by those of Schoeps of Jena. According to Bouillard, when an animal is deprived of its brain, it still retains its faculty of feeling: for although it falls asleep immediately after the operation, yet a very slight irritation is sufficient to awake it. An animal thus deprived of brain, withdraws its feet when pinched, can walk about, and attempts to escape when seized. The animal cries when a hair of its whisker is plucked, or if vinegar be held to its nose, and strives to rid itself of the object which incommodes it. Thus, a hen deprived of its cerebral lobes by Dr. Bouillard, passed the greater part of its time in sleep. It awoke, however, spontaneously at intervals, then shook itself, flapped its wings, and again fell asleep, turning its head to one side and thrusting it under its wing. The slightest irritation of the skin was sufficient to awaken it, but upon the irritation ceasing, it returned to sleep. It walked spontaneously, fluttered and cried, and when seized endeavoured to escape. All these facts prove, beyond a possibility of doubt, that the power which enables an animal both to receive impressions, through the medium of the nervous system, and to communicate to the muscles the power of motion, is not resident in the cerebral hemispheres. [Dr. Graves here mentioned, that Dr. Craigie had observed, in a late number of Jamieson's Journal, that Coiter, a native of Groningen, had obtained similar results, and was acquainted with most of the facts since ascertained by Haller, Zinn, Flourens, Magendie, and others, although it is now near three hundred years since he wrote on this obscure subject, and had remarked the fact, that portions of the brain can be removed without serious injury to its functions.] The result thus obtained by experiments, is confirmed by the fact, that human infants have been born destitute of either brain or spinal marrow, but nevertheless evidently possessed of sensation, and able to move briskly, cry, &c. In a case of this kind, mentioned by Mr. Lawrence, there was no trace of either cerebrum or cerebellum; but the medulla oblongata formed a small bulb, with which all the nerves, from the fifth to the ninth pairs, were connected. It is remarkable enough, that this monster possessed exactly so much of the contents of the cranium, as our experiments on warm-blooded animals indicate to be the smallest possible portion of the nervous system actually necessary for the support of life; for we may remove the cerebrum and cerebellum without causing death; but if we injure or remove that portion of the medulla oblongata to which the fifth, seventh, and eighth pairs of nerves are attached, life immediately ceases.

In reptiles, these experiments are very easy in their execution, and very decisive in their results, for in them life lasts much longer after

the removal of the brain and cerebellum. Thus, a frog, says Mayo, preserves its vitality for a considerable time after this mutilation: its muscles act in concert: and when the animal is left at rest, he may be observed to draw up his legs, sit in the usual attitude, and retain consciousness and feeling.

But while we thus arrive at the fact, that motion and feeling, the most obvious and the most generally diffused of the nervous functions\*, may continue after the removal of the cerebellum and brain, we must not consequently infer, that these organs are unconnected with the power of perception, or the principle of muscular action. In the system of nature, addition is synonymous with improvement, and therefore the more complicated we find any particular organization, the more perfect we may conclude it to be. Voluntary motion and sensation are enjoyed, in common with man, not only by the whole class of vertebrated animals, like him possessed of brain and spinal marrow, but by that whole host of inferior beings in whom this portion of the nervous system is totally wanting. We are not, however, to conclude that sensation in these animals is of the same kind as that natural to man. It may, so far as the actual impression is concerned, be as delicate and fine, of which there can be no doubt on the mind of any one familiar with the habits and operations of insects; but then this impression, or sensation, is only momentary; what is felt is not recollected, becomes not the object of reflection, is not stored up by the mind. In vertebrated animals, the addition to the nervous system at once exalts and increases the intensity of this function, so that the sphere of its influence is augmented, and its character almost changed, in consequence of the additional energy acquired by the co-operation of the spinal cord and its cerebral appendages. In other words, there can be no doubt, that

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\* In Ehrenberg's Researches on the Structure of Infusory Animalcules, in which the only recognized symptom of vitality is voluntary motion, it has been shown, that even the smallest of these monads, not exceeding  $\frac{1}{1000}$  of a line in diameter, are not, as supposed, a homogeneous jelly, but are organized animals, distinctly provided with a mouth and an internal nutritive apparatus. Ehrenberg has discovered in these animalcules a distinct muscular, and probably a nervous, tissue; and what is of great importance, he has completely decided the question of *equivocal generatam*, by showing the great principle of Harvey, "Omne vivum ex ovo," applies to infusory animalcules, all of which are either viviparous, oviparous, or gemmiparous. Dr. Graves stated, that as he had hitherto taught the doctrines of Treviranus and Oken on this subject, he gladly availed himself of this opportunity of professing himself a convert to the doctrine of Harvey.

although the brain and cerebellum do not confer on us any one new sense, yet by being the seat, the instrument of intellectual powers, animal instincts, and propensities, they operate on the information derived from the senses in such a manner as to reduce the transient impressions into permanent ideas; and hence the common notion, that the brain is the seat of sensation may be received as true in a general sense. In fact, sensation and the intellectual powers are essentially distinct, though they concur to a common end; *in man*, the *medulla oblongata* is sufficient for the former; but brain and cerebellum are necessary for the latter.

This principle being acknowledged, the next step in the inquiry is to determine, whether these portions of the nervous system all co-operate in producing a combined effect, or whether various parts of these organs have not some particular function allotted to them. This is a most interesting and important question, and, if considered in all its details, would lead to a discussion concerning the validity of the doctrines taught by the phrenologists; but at present not intending to enter on this much controverted subject, I will merely advert to it in a few general observations.

As animals possessed of neither brain nor cerebellum are nevertheless endowed with perception, volition, propensities, and instincts (the latter often to a wonderful extent), we must presume that the addition of such preponderating organs as the brain and cerebellum in the class of vertebrates, is meant not merely to augment intellectual powers already in existence, but also to increase their positive number. Accordingly we find, that exactly in proportion as the encephalic portion of the nervous system is developed in the vertebrate animals, we can trace the appearance of new faculties, which, few and obscure in the lower species, become, as we ascend, more numerous and more distinct, until we arrive at man, in whom the brain attains, as it were, *per saltum*, a degree of pre-eminence sufficient to place him far above all other species of mammalia. And has the Creator conferred on man this gift in vain? Certainly not; for his wisdom has attached to this superiority of cerebral development a corresponding exaltation of intellectual faculties; so that of his fellow species, man alone is dignified by the possession of reason. (Dr. Graves here remarked the multiplication of nerves, and the improvement in structure and augmentation in volume of the brain, in proportion as we ascend the scale, until we arrive at man, and find a nervous system possessing some parts of which animals are destitute, and wanting none which they possess. He cited a passage from Mr. Combe's work, in which it is stated, "That whenever a will, a rational will, so to speak, depending on a choice between different impulses or motives, exists, there a brain exists also, which becomes complicated and perfect in proportion to the number of instincts and faculties with

which the animal has been endowed." He (Dr. G.) agreed with Mr. Combe in attributing a certain degree of reasoning power to animals; but he, at the same time, preferred confining the term reason to the aggregate of the intellectual powers of man, which, partly by the addition of faculties not possessed by animals, and partly by the just harmony and proportion of its constituent parts, form an intellectual whole, to which the ennobling term REASON ought alone to be appropriated. Dr. Alison had stated, that brutes "evince some exertion of the faculty of reasoning," but it is obvious that this includes not the power of forming or dwelling on general abstract notions.) It would be presumptuous, indeed, to assert, that the Omnipotent Author of Life was unable to confer this boon without adding the matter of our nervous system. It would be idle to suppose, that an increase of cerebral development was the only expedient by which the Deity could infuse into the mind of man this invaluable blessing. No doubt had he passed his almighty fiat, matter much ruder in its organization, and much inferior in quantity, might have been made the instrument of thought, and might have enjoyed the same high prerogative of reason; but such is not the plan adopted in the construction of the animal kingdom, where we always find the laws of life conforming to the qualities of matter. He who constructed the eye was the fabricator of light, and he who fashioned the ear ordained also that air should communicate vibrations. Such has been his will; for the idea of Omnipotence forbids us to believe that it was impossible for him to give us vision without eyes, or hearing without ears; and so it is with the nervous system and its combination with intellect. The same principle of adaptation of corporeal structure to the attainment of a specific end, the same observance of an uniform plan, in obedience to which, from the first dawn of sensation and perception that distinguish the lower animals from plants, through the various degrees of instinct and intelligence observable in the different classes of the animal kingdom, we perceive an uninterrupted gradation, an unbroken chain, until we arrive at man, when the nervous system and the intellect receive a simultaneous improvement, so great as to place man far above the rest of his fellow creatures. But man does not only differ from other animals in the configuration of his brain and the capacity of his mind, but also exhibits the singular fact of a great difference, in these respects, between individuals of the same species: it being an obvious fact, that different men exhibit as much disparity in their intellectual powers as if they were animals of a different genus. In all such cases (that is, where the difference between the intellectual powers is extreme), there also we invariably find a striking difference between the form and size of their skulls; the most highly-gifted always presenting a greater relative proportion of brain. So far then must

every reflecting man be a phrenologist—so far must all concede, that cerebral development and mental power are mutually proportioned to each other. But can we advance farther than this general proposition, and may we not affirm, with considerable certainty, that the anterior portion of the brain is, *ceteris paribus*, proportioned in size to the capacity of the mind—to the intellectual faculties, properly so called? Experiments on animals, and observations on man, afford very strong reasons for arriving at such a conclusion, which tends to establish the leading principle of the phrenologist, “That different portions of the brain perform different intellectual functions.” Now this is a principle in support of which many arguments from analogy might be adduced. We find that the brain is divided into different lobes; that it consists of different structures; that it is composed of cerebrum, cerebellum, and medulla oblongata, and the same variety of structure, &c. is to be found in the spinal cord. It would appear, certainly, that the anterior portion of the brain is devoted to the intellectual faculties, but that the strength of the moral feelings and animal propensities is regulated by the development of the remaining portions of the encephalic mass.

But while I thus accord to the phrenologists the general principles of their science, I cannot avoid expressing strong doubts concerning the correctness of many of their particular conclusions; for although they profess to have established these conclusions on facts, and arrived at them by a legitimate process of induction, yet many reasons, with which I shall not now detain you, compel me to suspect that, in this, as in many other instances, the interests of science have been retarded by an over anxiety to arrive at positive results. The general temperament of the body, which is supposed to afford the means of estimating the *quality of the brain*, is, I fear, but an uncertain guide in this case; and I am inclined to think, that the absence of any standard by which we can compare together the *qualities*, or, what is the same, the *nervous energies*, of different brains, will ever prevent phrenology from ranking among the accurate sciences. Another source of error arises from our not being able to appreciate the size of the different parts of the *base* of the brain, parts as likely as any others to discharge the functions of particular organs. It might be added, that in proportion to its size and connexion with the rest of the nervous system, the cerebellum has but few functions assigned to it. The very number of organs which have been established, the rapidity with which the different portions of the brain have had a separate function assigned to each, the total absence of any terra incognita in a world so recently explored, the importance and variety of the truths revealed in such quick succession by the disciples of Spurzheim, the uniformity of results obtained by so many different observers, the total absence of errors during the progress and growth of their systems,

are all circumstances calculated to awaken suspicion. They accord very little with the slow and vacillatory pace of the human intellect, struggling towards the attainment of knowledge in other and less difficult departments of science. I say less difficult, for can any thing present elements more stubborn to analysis than are the component parts of the human character? How many actions of any particular individual must escape the notice of the most scrutinizing observer, and how many motives, without a knowledge of which actions cannot be rightly interpreted, must remain concealed?

But let me not be misunderstood, or reckoned among the opponents of phrenology; for I have but little doubt that new observations, selected with more care and interpreted with more accuracy, will lead to very instructive and curious results, although certain considerations prevent me from hoping that the most diligent and candid examination of the human head will ever be capable of conveying so extensive and accurate a series of indications of the human character, as the professors of phrenology now claim for their science.

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ON THE  
EXTERMINATION OR ANNIHILATION  
OF THE  
*ASIATIC CHOLERA.*  
BY EUPHEMIZON.

TRANSMITTED TO THE  
RT. HON. VISCOUNT MELBOURNE,  
*Secretary for the Home Department, &c.*

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A WHOLE year has elapsed since the cholera entered Britain, and it still proceeds, quitting one place and attacking another; nor, from any thing hitherto done, have we reason yet to hope, that its malignity will be diminished, its course resisted, or its duration terminated. We are now sensible, that the cholera respects nor age, nor sex, nor rank, nor power. The suffering of its ravages once, is no security against its return: since the year 1817 it has visited Calcutta, I believe, twelve times. Commerce interrupted, general impoverishment, the treasury exhausted, the lower orders starving, costly Boards of Health, and thousands perishing, form the picture of our state.

Man is an indolent creature, and would rather endure a great deal than deviate from his wonted habits. This natural apathy, assisted perhaps by a little self-sufficiency, will account for attachment to antiquated systems. But, after a plan has been acted on over the greater part of the civilized world for fifteen years, attended only with wide-spreading mortality, it is surely time to pause, and consider, whether some change might not be made for

the better. It will be admitted, I think, that the end here proposed is of such importance, that the attempt ought to be encouraged, did its attainment even seem possible. If you concur, and are unprejudiced, candid, and benevolent, read on attentively, and judge for yourself.

That we may be guided by a fixed principle, take this proposition: that endemic and epidemic diseases, whether contagious or not, depend chiefly on *the state* of the atmosphere for their mildness or malignity, and for the facility and extent of their propagation; and further, that *this state* being changed, they undergo a corresponding change, or disappear.

Let us begin with that part of our proposition which respects contagion. A simple reference to the histories of small-pox, measles, scarlet fever, or any other fever held to be unquestionably contagious, is all that is requisite to convince you, that such maladies correspond with the atmospherical constitution, whether they are characteristically mild or malignant, whether they spread slowly or rapidly, whether they remain within a determinate enclosure, or involve nations in succession.

The second part of our argument, concerning endemic diseases, though it cannot be so compendiously settled, will, we trust, afford equal satisfaction.

Every locality displays the power which it possesses over the living structures and functions of plants and animals: health at one time seeks the city, and at another the fields; at one time the land, at another the sea: there is not an open street, or a narrow lane; not an elevated ground, or extended plain; there is no variety of position, situation, or circumstance, which does not modify the phenomena, and not one which is not more or less under the dominion of human ingenuity.

Every year, every portion of the year, has its peculiar temperament and ruling influences, which co-operate with, or repress the disposition of every spot on the surface of our earth, in relation to the health of its inhabitants. The whole history, in effect, of endemic diseases teaches, that they are generated from local causes, and that these causes are almost inert without the aid of certain seasons, or certain states of the weather; hence it is, that intermittent fevers, for example, prevail at particular seasons; but in each, they are mild or malignant, according to the reigning constitution of the atmosphere.

Is it not evident, that fevers remotely induced from a marshy soil, or that any other endemic disorders caused by effluvia acting in conjunction with the external air, are neither to be confined nor overcome by any means, however good or wise, employed within secluded apartments? Such means can have but little control over a subtle fluid, which enters by every aperture, and is inhaled with every breath! Besides, though they may do good to my neighbour who is sick, they cannot defend me who am well; to put me in safety,

you must purify that which I respire, and in which I must perform all the offices of a living being.

The ancients suffered from these evils, detected their causes, and discovered the remedies. In order to avert agues, putrid fevers, and other diseases originating in local contingencies, they improved their cities and dwellings, felled forests, drained marshes, supplied valleys with lakes and running streams; in fine, they destroyed the source, or, in other words, they rendered portions of the air salubrious. Does this not prove that a contaminated portion can be corrected? Does it not lead us naturally to expect, that if one kind of effluvia vitiate the air partially, another kind may be found to correct that vitiation? We request these observations to be kept in mind, while you peruse the next, which is the most important division of this essay.

Certain distempers received the epithet *epidemic*, from their being referred to a cause, so diffusive, that it did not affect individuals merely, but the million; and no medium seemed commensurate, except the common air, the sovereignty of which is maintained by all the writers on epidemic diseases; even those on the plague and yellow fever, in which the existence of contagion is warmly disputed confirm the doctrine by well-accredited statements. They inform us, that in Egypt, Italy, &c., the plague has instantly abated or disappeared upon the falling of a heavy rain, or the sudden supervention of heat or cold; and to persons, not medical, the thought has often incidentally occurred, that a similar alteration might be effected by artificial means. Hume, vol. vii., p. 416, speaking of the great fire in London, says: "The plague, which used to break out with great fury twice or thrice every century, indeed was always lurking in some corner or other of the city, has scarcely ever appeared since that calamity."

It was a maxim with the Peripatetic philosophers, "that the air is the universal cause, modified in its effects by subordinate causes;" nor, as we learn from the eradication of the endemic diseases, is the conception modern, that the air, corrupted by physical agents, may be divested of its deleterious qualities by agents of the same class; but if any one contends that a limited insalubrity can supply no argument applicable to an unbounded noxiousness, I answer, that the air encircling our globe never either was, or was ever imagined to be, totally and simultaneously in such a predicament; the endemic and epidemic poisons coincide in having each a topical origin; the most sensible difference between them is, that the one is stationary and the other migratory. The epidemiciferous air leaves the attacked places sound, at least for a time; so that at every stage of its journey it assumes the circumscribed character of an endemic; therefore whatever removes this intemperies, at any one stage, will afford the best chance of its interception; and were the same means employed, wherever it has

been, is, or shall be, there could be no doubt of its complete extinction.

With these truths, likewise, the ancients were thoroughly acquainted, and we shall see that they made the proper application of them.

Hippocrates, in his cases, narrates succinctly the situation and circumstances of the place and house in which each patient lived; he notes, also, the season and the prevalent maladies, never neglecting the atmosphere, of which he well knew the supremacy. He gave warning of the approach of epidemics; and when a plague from Ethiopia, remarkable in history for the devastation which attended its progress, had taken possession of the Grecian territories, he, by immense conflagrations, delivered his country.

But this man had his adversaries; what he proposed, they condemned! No medical fraternity lent him aid; he had what was infinitely better, the support of his independent, discerning, and energetic countrymen; they did not choose to be swept from the land of the living, rather than adopt the measures devised for their preservation!

More ancient still than the times of the father of Grecian medicine;—Acron of Agrigentum gained great glory by kindling fires to expel a plague which ravaged Athens. Sulphurous purifying is described by Homer; and, going farther, we find the merits of fumigation transferred to the Egyptian priesthood.

The facts above detailed prove, that the idea of a necessary connexion between certain diseases, and certain states of the air, and of their being removable by art, is of a date equally remote with the history of the human race; and, considering the deeply-rooted impression, it is astonishing how little advancement was made in this very interesting branch of physics. The atmosphere seems to have been forgotten, or the attempts to purify it remembered only as one of the curiosities of literature. *Contagion became the terror of men*; and, except for the chambers of the affected, the means of protection were scarcely ever dreamed of. These consisted of the burning of resinous woods, and a confusion of aromatics: to which, in later times, were added cinnaubar, arsenic, and explosions of gunpowder.

It does not appear that any improvement was thought of till the year 1758, when Dr. James Johnstone, of Worcester, published a treatise, entitled "An Historical Dissertation on the Malignant and Epidemical Fever which prevailed at Kidderminster in 1756;" in which he proposed the employment of muriatic acid for the purification of vitiated air; but it was M. Guyton Morveau who, nineteen years afterwards, "established its efficacy by a variety of well-conducted and decisive experiments." In the year 1773, the Cathedral of Dijon was infected to such a degree by exhalations from the vaults, that it became necessary to shut it up; and towards the end of the same year a putrid fever burst forth in the jails of Dijon. In the cathedral and the jails, M. Guyton Morveau

happily practised the muriatic acid fumigation, and afterwards France was relieved, by the same means, from a terror greater than that inspired by the arms of Europe combined against her.

Immediately after this decisive result, his method was adopted by individuals in divers countries, with equal success. In the second year of the Republic, 1794, a malignant fever prevailed in France; in consequence of which the Convention decreed, "That detailed instructions respecting the mechanical and chemical means of preventing the progress of infection, and of purifying the air, should be printed and sent to the military, naval, and civil hospitals;" and, seemingly aware that the intention might be frustrated by the intrigues of envy, Guyton Morveau was "charged with the superintendance of this matter."

In 1800, the yellow fever committed dreadful havoc in Andalusia. The Spanish government sent two physicians to practise the new method vigorously. The official report soon returned, stating, "It is to the acid fumigations we owe the extinction of a malady which threatened to throw the whole nation into mourning."

While acid fumigation was spreading over the Continent, it could not fail to attract attention in Britain. In the year 1780, a putrid fever, called the jail distemper, appeared amongst the Spanish prisoners at Winchester. Dr. James Carmichael Smith, physician of the Middlesex hospital, repaired thither at the request of the commissioners of the sick and wounded: and, by means of acid fumigation, he had such success, that the House of Commons resolved, *nem. con.*, "That an humble address be presented to his Majesty, that he will be graciously pleased to take the merits of the said Dr. James Carmichael Smith into his royal consideration, and to confer upon him such mark of his Majesty's favour as his Majesty in his royal goodness may think fit."

In the year 1795, a most pernicious fever threatened the British navy, and the Russian squadron then lying at Sheerness. Earl Spencer, with the concurrence of the rest of the Lords Commissioners of the Admiralty, ordered, that the plan proposed by Dr. C. Smith, of fumigating with nitric acid gas, should be put into practice forthwith. The trial was made first in his Majesty's hospital-ship, *Union*, and subsequently in all the infected British and Russian ships of war; success surpassed expectation. It were superfluous here, however, to detail the various trials made in prisons, hospitals, and ships;—it is enough for us, that they all had the most happy results. We shall content ourselves with the notice of one conducted by Sir James McGrigor, to whose exertions the army and the nation are much indebted. When at Jersey with the 88th regiment, in 1797, a low typhus fever had broken out, and he determined to give the nitric fumigation a fair trial. After detailing the process, &c., he proceeds,—"The effect of

the nitrous fumigations is evident, not only in the diminished number of cases, but also in their degree of virulence. The cases that have of late appeared have been gradually becoming milder, and are now what a late writer would call cases of simple fever, having neither petechiæ nor any dangerous symptom."

To do good is a most arduous enterprise. In the year 1800, a pestilential fever desolated Genoa, and the yellow fever Cadiz. Morveau exerted himself, in vain, to introduce his plan; the population of these cities suffered severely; but Andalusia was saved,—not with the consent of the medical practitioners—they hate innovation, it disturbs their tranquillity,—but by the command of the Spanish government. When the yellow fever broke out in the Peninsula, apprehensions were entertained, that it would thence diffuse itself in every direction; and it is more than probable, that our hemisphere was rescued from this dreadful invasion solely by the acid fumigation.

I do not recollect, in the whole history of medicine, one solitary instance of any united party or body of medical men passing beyond the precincts of blind routine. Jealousy paralyzed their minds, or shut up the avenues of their understanding; so that any new means of alleviating or averting human misery, seemed to them more terrible than famine and pestilence, with all their concomitant horrors!

Be these reflections well founded or not, this I predict, that unless the government interpose its fiat, or the people consult for themselves, we must continue, as we shall well deserve to be, the apprehensive spectators of woful depopulation, or the passive victims of the inexorable cholera.

It may be said, that the government appointed persons invested with proper authority; but, I ask, if a fleet were sent upon an expedition which proved a total failure, would no inquiry be made?

Let us now review the proceedings of our Boards.

To recommend and enforce cleanliness, and provide for the necessitous, was most praiseworthy; this is just what has ever been attended to on such emergencies: it was most munificently done in the year 1665 and 1666, but it neither stayed the plague nor assuaged its fury.

If we examine the directions given for the treatment of the cholera, we find a congeries of rules, drugs, and practices, a transcript of those originally advised in the plague, a little modified by modern pharmacy and chemistry.

The same precautionary measures, the same injunctions, prescriptions, and profusion of chlorides, that have been chosen here, together with the burning of clothes and furniture, had been put into operation throughout the Russian empire, with all the rigorous punctuality of the autocracy; still the foe marched on unimpeded. Our medical dictators, however, did not relinquish a system which had proved unavailing, and, in many respects, worse than

useless! Is it not unaccountable, even upon their own contagious fancy, that they trusted to lime and chlorides, which, whatever may be their virtues on other occasions, had every where proved ineffectual against the present calamity? while facts, which every one of them should know, demonstrated that the mineral acids were the only agents which ever had overcome putrid, pestilential, and epidemic fevers!

It is not necessary for a physician to be of an inventive genius, endowed with the faculty of producing original ideas; but if his attainments are not on a level with those of the age in which he lives, if other pursuits have made him neglect that information which his public duty requires, he certainly is no ornament to the profession, no benefactor of mankind.

From the transactions of our committees of public safety, it might be believed that the labours of Morveau, Smith, and others, and the benefits of their ardent perseverance, had neither made any impression upon their contemporaries, nor left any trace to their successors: it is not so; many practitioners, whenever occasion offered during the last thirty years, have availed themselves of the knowledge with which our art was then enriched; but those men, who treasure up every fact of utility, more anxious to deserve than to seem deserving, cannot descend to that low ground where lies the short, and perhaps the only broad, way to the favour of those who have at their disposal the countenance of fools and the gifts of fortune.

Dr. Sanders, during his professional career, never lost any opportunity of using fumigations, with such of the acids as he judged most suitable to the particular case; and while he taught the practice of medicine, he never forgot to instruct his pupils when and how they ought to be administered. In connexion with his continued observation of the efficiency of these agents, he was in the habit of reflecting on the relations which subsisted between the atmosphere and epidemic diseases, and had long entertained the opinion, that should our country be invaded by any pestilential disease, the effecting of a change in the surrounding air would furnish our only sure weapons, offensive and defensive, and speedily reward us with victory. The principle seemed to him so rational and obvious, that it had just to be mentioned to ensure its being acted upon.

Accordingly, in a letter on the subject of cholera, of date 16th November, 1831, addressed to Sir Henry Hallford, M.D., President of the Central Board of Health, he introduced the topic of purifying the air, and he expressed a wish that measures should be taken to accomplish this purpose.

"Whether the cases said to have recently appeared in Sunderland, Newcastle, and London, are, or are not, of the Asiatic description, a visitation may be apprehended in contempt of all guards, quarantines, and sanatory cordons, the relics of barbarism; but if a meliora-

tion could be effected in the constitution of the atmosphere, this would be at once a universal preventive and remedy. Taking a hint from antiquity, might we not have fires on our hills, and discharges of artillery throughout the land?"\*

Copies of this letter were sent to Drs. Russell and Barry, but their *views* were not *aërial*. The return made to the doctor, though not avowed, was very flattering. Drs. Russell and Barry presented a Report, which was published by the Board on the 13th of December last, containing, almost *verbatim*, the pathological part of this letter. Now, that man who appropriates to himself your ideas, sets the highest value upon them; he prefers your reputation, and pays you the greatest possible compliment; nevertheless, as Dr. Abercromby knows, such compliments are not rare.

The object of Dr. Sanders was, that the invader should be expelled by a *coup de main*; but such was not the will of the Board. This attempt having failed, he thought, that those concerned—and who was not concerned?—would unite with him to destroy the enemy's forces in detail; wherefore, in the beginning of January last, when the first well-ascertained case of cholera occurred in this city, he wrote to the Lord Provost:

" January 5, 1832.

" MY LORD,—In medicine it is not words, but deeds, that save the lives of men; it is now time to act. The case of Leech, which occurred yesterday, is of a decisive character; it is an unequivocal example of the spasmodic cholera. By the prompt measures taken, the patient is in a favourable way; but there would have been little or no danger, had assistance been called during the first stage. Every apartment in that house No 4, West Adam Street, ought to be instantly fumigated, and the floors sprinkled with the solution of the chloride of lime or soda. I would advise also to raise the fumes of muriatic or oxymuriatic acid (chlorine), throughout the open street, which would add much to the protection of the neighbourhood, nay, even of the whole city," &c.†

The only answer made him was vituperative paragraphs in several journals. After this second repulse, he resolved on doing all he could within his own sphere. Since that time not a few experiments have been made, and with the most complete success. In no instance, where the chlorine gas was used, has the disease attacked any one in the same family, in the same tenement, or even in the same range of buildings: in fine, wherever the chlorine has been assiduously extricated within and without the dwellings of the patients, the disease went no further: and wherever, in the open air, near any uninfected house, that house enjoyed perfect security.

"In February last, chlorine was diffused in the air of Fishersrow for eight days succes-

sively, during which the cholera was arrested, became milder, and finally disappeared; nor have we since heard of even one case there. By the same means the cholera was in one or two days completely stopped at Portobello; and notwithstanding its vicinity to, and continual intercourse with Edinburgh, the population of that fine village seems to have been preserved by the occasional repetition of these fumigations."

Acid fumigations of various kinds have been employed, and all of them have been beneficial; but those most approved, are the chlorine, the muriatic acid, and the nitric acid. The chlorine is best adapted for streets, lanes, and confined places; the muriatic acid, for open spaces; and the nitric acid for apartments in which there are putrid fevers and ulcerations; nor should we omit vinegar, which serves every purpose on ordinary occasions.

In the cholera, however, we must rely principally upon the chlorine and muriatic acid. (For the mode of procuring these, see No. 36, p. 303.)

To sum up—

It would be difficult, I believe, to produce, within the whole compass of those observations upon which medical practice is founded, a more complete combination of facts bearing upon one point. I deny, that there is any article in the materia medica, any prescription, or even after grave consultation, any decision given, better sustained than the acid fumigations.

Is it not established upon the solid foundation of experience and experiment?

1. That endemic and epidemic diseases, whether contagious or not, are changed, or disappear, when the state of the atmosphere is changed or corrected.

2. That such epidemics, as the yellow fever, the putrid fever, and the cholera, have been, may be again, and consequently, upon every recurrence, ought to be, promptly exterminated.

3. That the acid fumigations are the means, and as yet the only well-ascertained means, by which this end can be attained.

I have here laid before you, with the facts and arguments by which it is supported, that plan which, carried into vigorous execution, would, in my humble judgment, free us from the Asiatic cholera. Had it been adopted when suggested twelve months ago, that scourge of our race would scarcely have been felt in the British Islands. How much injury to our commerce, how much loss of capital, how much distress, would have been prevented! How many thousands, who are now widows and orphans, and a melancholy burden upon the overburdened community, would have still had their natural protectors!

Though brought forward by one who had nothing save advice to offer, it is extremely to be lamented that this subject did not obtain due consideration; but it was little to be expected, seeing

"The fashion of these times,  
Where none will sweat, but for promotion."

\* New North Briton, 16th November, 1831.

† Edinburgh Observer, January 6, 1832.

Concluding, I feign no apology: convinced indeed, as I am, that an overwhelming evil might be annihilated, silence on my part were unpardonable. It will be with this as with the other afflictions superinduced upon the ordinary lot of humanity; let the cause be removed and the effect will cease, just as darkness vanishes before the rising sun.

EUPHEMIZON.

Edinburgh, October, 1832.

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REMINISCENCES  
OF AN  
ARMY MEDICAL OFFICER.

PART I. CHAPTER II.

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HAVING, in the preceding chapter, made allusion to Dr. Richard Harrison, it may be proper to add, that this accomplished and industrious physician became a Fellow of the Royal College of Physicians, and was the nephew of Dr. Harrison, of Holles-street, Cavendish-square, who himself was the intimate of Sir Joseph Banks, Dr. Matthew Baillie, Major Cartwright, and many others (some departed), who did good in their day and generation, and would have done more had prevailing wickedness and adulteration permitted them. Dr. R. H. was a graduate of Oxford, and in high repute among his brethren of the Royal College; nor can there be the slightest doubt, that he would have rapidly risen to well-merited eminence had it been the will of Providence to extend the period of his earthly career.

The instance, in which this gentleman distinguished himself, on behalf of the medical students, at the University of Edinburgh, appears, even at this distance of time, to be worthy of record. When he and I, and all who were of our epoch, commenced the course of education, which is required of those who propose to take the highest honours (*summos honores*) in *medicinâ*, it was clearly understood, that the expense would be a certain established sum; and we, therefore, engaged in the covenant with open eyes. But, after having proceeded (for my own part a full year) in our studies, we ascertained that an addi-

tional burden of 20*l.* sterling was to be laid upon the doctorate. Upon this, considerable alarm arose; and some of those, whom the new tariff was likely to affect, forwarded a sort of remonstrance to the medical faculty, the members of which (the medical professors in the University and, it grieves me to add, the parties who were to *profit* most by the imposition) declined to aid in redressing the evil complained of.

Whereupon the students at large were invited to a sort of public meeting, for the purpose of sanctioning some ulterior measure. At this Dr. H. attended, and took a leading part. The case was clearly explained in a striking and forcible manner; and the sum of 20*l.* being an affair of great consideration to the majority of the assembly, the propositions of the more wealthy were carried by acclamation. The result of this meeting was, the preparation and transmission of a petition to the same effect as the former, but addressed to the whole body of the professors assembled in *pleno Senatu Academico*. It fell to the ground, as the former had done, an event which was not to be wondered at: but this was not all.

Some of the college authorities—I shall not attempt to fix the odium upon any particular person or persons—repaired to the chief magistrate of the city (a remarkably vain and ignorant man), and denounced the students as holding unlawful meetings for seditious purposes, under the secrecy afforded by the precautionary construction of a masonic lodge. It is true we did meet in a lodge, but not in the character of masons, or of conspirators of any other sort than that which I have attempted to describe. The lodge, however, not being required for the purposes of the mysterious craft at the time, was regularly hired for the occasion, as might have been an auction room, or a meadow.

Dr. R. Harrison and Dr. Turner (not the professor in the London University) were denounced to my lord as the heads of this awful and most dan-



gerous conspiracy:—that of Venice dramatized by Otway was nothing to it. These gentlemen were forthwith summoned before his Right Honourableness; and I have been informed that a dialogue to the following effect took place among them.

*Lord Provost.*—(In a violent passion, real, or more probably assumed) So! Mr. What's-your-name, and you, Mr. Thingumbob, what's all this you're about?

*Harrison.*—Really, my lord, we do not know for what purpose you have summoned us before your lordship.

*L. P.*—Don't know!—Don't care, neither, I dare for to say; but, depend upon it, there's room enough in the Tolbooth for all of you, if you break the laws of the King's Majesty's Parliament,—I can tell you that; so mind your eye!

*Turner.*—May it please your lordship, to inform us whether we are brought hither upon any charge?

*L. P.*—Charge! Charge! yes, to be sure. Ma certie, chairege enuech! Deevils—conspirators!—what's the maiter?

*Harrison.*—We are about, my lord, to obtain redress for a breach of covenant on the part of the University. They want to raise the Graduation Fee; and there are hundreds of students who will be disappointed in their expectations, if this alteration in the expense of education be permitted.

*L. P.*—Wha the deevil are you?

*Harrison.*—I am a student of medicine in the University here; a gentleman by birth; one of fortune sufficient to carry me through all the expenditure which may be laid upon me; but I advocate the cause of poorer men.

*L. P.*—And wha (*speaking to the other*) may ye be—freen?

*Turner.*—I am also a student of medicine, like the other gentleman, and am anxious to protect my fellow students and myself from oppression.

*L. P.*—Sit doon, lads, and be douce.

*Loquitar Harrison.*—My Lord! The associated students have no desire or design to break the peace; but, were your Lordship fully acquainted with the circumstances which have called us together, we are very sure that your Lordship would approve of all the steps we have taken. Our only remaining resort is to the Town Council, of which your Lordship is the head, they being the patrons of the University.

*L. P.*—And what then?

*Turner.*—Your Lordship's powerful influence will obtain redress for us aggrieved students.

*L. P.*—But, suppose the Town Council cannot accomplish your object?

*Harr.*—Then the students will go in a body to *Glasgow*, and graduate there.

*L. P.*—Don't go!! Ma certie!! Think o' that!! Na, weel than? Lard pity 's a! Are ye in eernist?

*H.*—Quite so, my Lord; it is a settled point.

*L. P.*—God be here!!

*T.*—Will your Lordship permit us to hold another meeting for the purpose of petitioning the Town Council, and give us the benefit of your authority and influence?

*L. P.*—Ony thing ye like!

*Harrison.*—Then, my Lord, we will call a meeting, by advertisement, under your Lordship's sanction, and communicate the proceedings, as well as the result.

*L. P.*—Good morning, &c. &c.

The dialogue, now related, terminated in a manner which resounded highly to the credit and dexterity of our ringleaders, as the gentlemen were called. Finding they had made a mollifying impression upon the head of the Town Council, they availed themselves of the turn the tide had taken in favour of their case, and, most respectfully, besought permission to hold another meeting for the purpose of petitioning, or memorializing the patrons of the University. This his Lordship condescended to grant; and hand-bills were printed,

announcing that, "by AUTHORITY of the Right Hon. the LORD PROVOST, the associated students of medicine would meet in such a place, at a certain hour, &c." The meeting was held, and at it a most ludicrous circumstance occurred.

I cannot recollect who was chairman; but there were three or four hundred *assistants*, as the French term it. Of course, there was some speechifying,—upon the whole, perhaps, to the purpose,—with the exception of a certain gentleman, whose name has disappeared, for several years, from the list of the officials attached to a celebrated and illustrious institution, still flourishing, and certain to flourish, in London. This oratorical flourisher stepped to the centre of the apartment, and declaimed, in evidently *concocted* terms, with a centigrade of violence more than I and many others thought necessary on the occasion. As soon as he had concluded, (for every body was afraid to call him to order), a very genteel and intelligent person rose, and informed the meeting, that he had good reason to believe there was a person present, whose business it was to watch the proceedings, and inform the enemy who might take any part in them; adding, that, as he knew this person by sight, if he did not withdraw, he would point him out to the indignation of the assembly. Hereupon, a tall, gaunt, shabby-looking spectre, whom I had certainly seen attending some of the *medical* lectures, but whom I understood to be also a student of *divinity*, gathered himself together and stalked off, amid shouts of laughter.

When the writer visited Edinburgh, at the distance of about twelve years after these occurrences, he found that "the spy" was still there, and had risen into eminent celebrity. By what means, do my readers suppose?

Prepare to hear something! He was the original of the most ineffable of characters ever drawn by a graphic

pen, and the subject of many happy efforts of the pencil, and will be known till the end of time by the immortal name of *Dominie Sampson!* "*PRODIGIOUS!*"

To cut this digressive passage in our history as short as possible, let me add, that our petition was successful, and our object was accomplished. But—the petition was handed over to the professors by the Council, with all our names attached to it. This (there was reason to believe) had its effect, when some of the petitioners went up for examination. The *plucked* were unusually numerous about this time, and one of these was the little gentleman in knee-buckles, silk stockings, shoes, black clothes, very whitely powdered hair, and a tie over the nape of his coat collar, whom I have spoken of as the *flourisher*. For my own part, I saw (when my turn came) no indications of displeasure—but more of this anon.

Ομικρον.

#### CONTRIBUTIONS TO PHYSIOLOGY.

BY DR. TUTHILL,

*Medical Staff, Dublin.*

#### A CASE OF PTOSIS, WITH STRABISMUS AND AMAUROSIS.

PRIVATE Samuel Fleming, 1st battalion 60th Rifles. *ætat.* 26, an Irishman, labourer, tall, proper stoutness and muscularity, nervo-sanguineous temperament, five years seven months in the service, during which period he has been once in hospital with bowel complaint; and three times with pain of head shooting from one side to the other, parallel to a line drawn from above one ear, or anterior portion of one parietal bone, to that of another. Says he enjoyed good health previously to enlisting in the service. In Nov. 1830, whilst marching from Clare town to Limerick, a distance of 18 miles, caught a severe cold, which affected the whole frame, inducing a rheumatic attack, with fever. He

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was admitted into the regimental hospital two days afterwards; the head and shoulders were very much affected, the muscles of the face especially: those of the jaws were in a state of tonic spasm, so as to render it impossible for him to open the mouth, or to admit any thing thicker than a spatula to pass between the teeth. He was two months under treatment, and says, that though he was enabled to return to his duty, he has never since been quite free from cephalic uneasiness. Consciousness and memory do not seem to have suffered: his association of ideas is correct. Cupping, venesection, blistering the head, and *mercurial salivation*, constituted the essential part of the treatment. In October, 1831, he was admitted again, for cephalic pains, into the regimental hospital, and had been treated for three weeks, during which period three or four blisters were applied to the head.

Whilst on duty in one of the hulks at Kingston in the same month, and two or three days previously to being admitted into hospital, he suddenly experienced a total loss of sight and confusion of ideas; every object appeared double. A lightness of the head preceded this optical defect. During a winter's residence in that village, he suffered a good deal from pain and throbbing at each temple, and uneasiness all over the forehead. The defect of vision went away as rapidly as it came. He experienced a temporary relief from the pain of the head, by the application of blisters. Two days after, being discharged from the hospital, he lost his sight again; every object appeared double, and he was unable to read; the right eyelid became gradually closed, and as gradually elevated; and whilst this last effect was accomplishing, the left also closed. Objects upon his right and left appeared as if directly opposite; and to correct this optical delusion, he closed one eyelid when he wanted to view the object correctly. Whatever was placed upon his right ap-

peared upon the left, and *vice versa*. This defect he, however, could not correct. The palpebræ became insensibly approximated, and incapable of voluntary action. The right palpebræ continued closed for three weeks, and a month afterwards the left began to close. The lids of each eye have been alternately closing and opening insensibly since the 19th Oct. 1831.

When I first noticed his case, the 20th March last, I perceived the right lids were almost quite closed, an oblique opening was only perceptible: its shape conical; the apex internal, beginning about two and a half lines from the internal angular process; the base, which was not above two lines in width, terminated within a line of the external angular process. He says, that for three weeks before he felt these lids gradually opening and becoming strong; whereas the left palpebræ were insensibly closing and becoming weaker; each pupil was considerably dilated. The iris of each eye was then inactive, not naturally influenced by light; but was brought into action by desiring him to look suddenly at objects, near and at a distance. The axis of vision of each eye was very much altered from the natural state, looking from without inwards, parallel to a wire fixed in about the anterior third of the orbital plate of the ethmoid bone. The eyeball was generally turned outwards, and with difficulty he could look to his nose. When he was admitted into the Royal Infirmary, the left palpebræ were closed without a wrinkle, as if they were pasted upon the eyeball; sensation was perfect all round the palpebræ, but motion impaired.

Looking into the eye with a magnifying glass, a little fringed-like membrane was very perceptible, hanging from half the upper edge of the floating margin of the iris, resembling what is to be seen in the horse's eye; this is nothing more than a fold of the membrane of the aqueous humour in the latter; but whether it were a reflection of it or an adventitious mem-

brane of the same character, in this patient, is questionable. This case is of peculiar interest to the physiologist, as affording him an example of different functions existing in different organs; and also of an affection of one existing independent of the least impediment in the other. We have, in this case, the ocular branches of the fifth and seventh nerves of sensation and motion quite healthy: the fourth and sixth are also unimpaired; but the third is affected in the performance of its functions. This is evident from the difficulty there is in bringing the pupil to bear upon the tip of the nose. The pupil is a little above the horizontal line, and always looking outwards.

Dr. Jacob, Professor of Anatomy in the College of Surgeons, Dublin, saw the patient, and examined his case very minutely; and to some of his remarks I am indebted for making a more minute detail than I otherwise might have done.

It is difficult to say whether the symptoms are attributable to an aneurismal or medullary tumour, or softening of the brain. It is evident that the trunk of the third nerve is pressed upon, from the following reasons: 1st. The ptosis; 2d. The conical surface of the eyeball being turned upwards and outwards by the superior oblique and the rectus; 3d. The dilated and irregular condition of the pupil from paralysis of the iris.

A solution of iodine with hydriodate of potass was given internally, and an ointment of the same medicines was applied to each temple, and around the palpebræ, for some time, but without any marked benefit. The stomach became so irritable, from the mixture, that it had to be omitted. The spirit of rosemary was also dropt into each eye, without any relief being obtained. He was discharged to his regiment without the least improvement having been effected.

NOTES FROM PROFESSOR MAYO'S  
PHYSIOLOGICAL LECTURES,  
AT THE ROYAL COLLEGE OF SURGEONS.

*Sound.*—Sounds are propagated more feebly through water than through air, and the size of the ear in fishes is therefore on a proportionately large scale. Sound will travel to a very great distance on the same level as that on which it starts; and therefore in this way every sound and intonation of a musical festival at York, might be borne on to London through a wire tube, with proper sounding-boards at each end.

*The Larynx.*—In vertebrated animals, respiration is performed through the posterior fauces, for the purpose of improving the taste. The orifice of the larynx is to protect the trachea, and to produce vocal sounds. In birds, the smaller aperture of the larynx is uppermost, for the purpose of closing the trachea; the lower aperture is where the bronchi divide, and is for the purpose of producing sound.

*The Skin.*—The skin in human beings consists of the chorion, or true skin; the pigmentum nigrum, on which the colour of the skin depends; and the thin elastic cuticle. In the mucous membrane of the alimentary canal, some subdivision into these is formed. The cutis vera is the most internal coat, and is found to be of the greatest thickness in the back, whilst in the other parts of the body it is thinner; it varies in thickness from  $\frac{1}{8}$  to  $\frac{1}{2}$  of an inch; it has little vascularity, but is fibrous and gelatinous in its texture. In reptiles it is dense and thick, and in birds it is thin. In reptiles without scales, and in frogs, it only adheres slightly at different parts. In fish and serpents it adheres very strongly; the papillæ of the skin are most prominent where the sense of touch is most perfect. In animals inferior to man, as in the elephant, they are most prominent at the extremities of the trunk; in aquatic birds, as in the duck, in the web of the feet; they are also found in lizards, chameleons, &c. The colour-

ing matter, or pigmentum nigrum, is most perfectly seen in the darker races of mankind, and is more frequently found in the mucous state than in the state of membrane, being very rare in the latter. In animals this pigment is found of every variety of colour, as in the mandril and the feet of the crow and swan; in the moor-hen it is grey—in the eagle, orange. In reptiles it is also found, as in the colour of the shell of the tortoise; in the lizard and chameleon; in the mackarel, and in the dying colours of the dolphin, it is also found. Upon and above this pigmentum is placed the outer cuticle, which seems to possess little or no structure in man; it is very elastic, prevents the evaporation of moisture from the body, and contagion from being carried to the delicate skin beneath, and thus prevents its absorption. Cuticle may thicken into horn, which is generally supposed (and this support receives the high sanction of Baron Cuvier) to be found upon cows; there is, however, an exception to this rule in the horn of the rhinoceros, which, on a section, is found to consist of many horns growing together. The inner coat of the stomach of the ostrich is found to be of a fibrous character; in another part of the body the cuticle may thicken into hoof. As another strong and admirable proof of the adaptation by nature of the means to an end, it is found that the same type in structure is kept up in the gizzard or stomach of the ostrich, as in the horn of animals, where *occasional* force and pressure only are wanted, whilst another type of structure is observed, where *constant* or *continued* pressure is wanted or required, as in the skin of the whale or the hoof of the horse.

The skin of the porcupine, towards the tail, is converted into an arm of defence; the quills are not thrown out from the animal, as is commonly supposed, but they are fixed with so slight an attachment, that any substance or body which they pierce will readily tear them away from the porcupine's back. The tail of the ani-

mal is formed in a hollow cup, which will contain the urine, and through which the animal frequently propels it upon his pursuers. In the tortoise there is a thin skin, interspersed between the shell and the outer skin, which outer skin is formed by this thin skin. In the alligator, calcareous matter is frequently found in the skin.

The platysma myoides is the only cutaneous muscle in man. The cutaneous muscles of the skin of animals are all generally attached to the os humeri. The disk of the hedgehog is affixed by bands to all the bony parts around, and in this manner it can fold itself up, as it were, in a ball. The skin is a sentient and an absorbing surface likewise, as by it we feel and know the surface, size, and temperature of bodies. It is through the medium of the muscles that we judge of the hardness and weight of bodies; but the roughness and smoothness of them is judged of by the sentient surface of the skin. Air, when in contact with the skin, undergoes the same changes that it does when in contact with the lungs. The outer skin prevents rapid evaporation, and the contact of contagious matter; but it may be made to absorb by friction upon the skin, or by chemically decomposing it; or, lastly, by removing the outer cuticle, when absorption is found to begin immediately. Poisons may find their way from a vascular surface into the constitution through the blood, by the veins, but they are not the primary absorbents. In some animals the skin is defended by an unctuous substance, which is most commonly found in the cetaceous mammalia. The animal perspiration is divided into sensible and insensible: the insensible is at about the rate of eleven grains per minute, and is in much greater quantity than the sensible. The insensible perspiration is generally most abundant just before noon, in a dry air, and during sleep. The sensible perspiration is increased by temperature and exercise; but increased temperature does little by itself if not combined with exercise.

THE

**London Medical & Surgical Journal.**

Saturday, October 27, 1832.

WORKING OF THE ANATOMICAL  
BILL.

It is impossible to decide as yet on the advantages conferred upon the profession by the Bill for facilitating the Study of Anatomy, or rather the science of medicine; but we can state with pleasure, that the government and magistrates seem disposed to throw as few difficulties in the way as possible. Enlightened men could not act otherwise. It is consoling to reflect, that the violation of the tomb is effectually prevented, and that the profession have no longer any occasion to treat with resurrectionists. From all we have heard, we are sorry to state that many of the parishes have promised to supply the large medical schools exclusively, while they forget the interests of those in their own districts. They should recollect the old adage, that "charity begins at home;" and therefore we cannot but suggest the propriety of supplying the parochial, as well as the extra-parochial, schools of medicine. It must be recollected, that every legitimate member of the profession is entitled to an equal claim, according to the Act, and therefore his rights should not be invaded.

## MEDICAL EDUCATION.

WE have been highly amused at the strenuous advocacy of the present

system of education, urged by a contemporary, while every member of the profession, competent to form an opinion on the subject, condemns and censures it. According to this writer, hospital attendance, hospital fees, broken promises, and, in a word, every system of abuse, are incomparably excellent; while Professor Elliotson denounces the whole in most *energetic* terms. He truly and boldly declares, "that there was, at the beginning of the nineteenth century, in Great Britain, no full and complete school of medicine, no university affording a perfect medical education, and also capable of conferring privileges and honours, within four hundred miles of the metropolis, will never cease to excite wonder as long as it is remembered. The necessity of going from London to Edinburgh for the purpose of obtaining both a full medical education and a degree, is an absurdity which, a century hence, will scarcely be credited." But our poor benighted contemporary is so far in the rear of the spirit of the times, that he sees the present system of education in London transcendently superior to every other. No one, however, can be surprised at his obliquity of vision, who recollects that an hireling of those, interested in the present defective and absurd system, must advocate a cause which every enlightened member of the profession acknowledges to be bad, and requires improvement. This medical tory would wisely stand still, while all the rest of the world is rapidly progressing, and would endeavour to uphold not only a defective

but a peculating plan of education, which, we rejoice to say, will be speedily destroyed by the wise and liberal system proposed by the London University.

We leave our contemporary to condole with his masters on the immediate loss of exorbitant hospital fees, careless and irregular attendance on sick, imperious taciturnity to students, and on all those happy privileges they so long and so unjustly possessed. Better times are about to come. The plan proposed for admission to, and attendance at, the University Hospital, must be adopted throughout the kingdom, and the monopoly enjoyed by the Examiners and Council of the Royal College of Surgeons can no longer continue. The result of this change will be, the recognition of provincial hospitals, which will enable students to acquire professional education at half the present expense. Such will be a few of the benefits conferred upon medical students by the Faculty of Medicine of the London University, while the punctual attendance upon suffering humanity will confer the greatest advantages on the largest portion of the community. When we looked to the Professors of the University as a body, and considered the liberal spirit with which their school was founded, we always expected the adoption of every improvement of which medical education was capable; but we could not but regret that London, the queen of cities and empress of the world, should even to this hour possess no legally constituted university, but be com-

pelled to send her sons four or five hundred miles to obtain a degree in medicine. Yet this is the state of things so strenuously advocated by our luminous contemporary.

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### Reviews.

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*Practical Observations in Midwifery, with a Selection of Cases. Part II.*  
By JOHN RAMSBOTHAM, M.D. 8vo.  
London, 1832. Highley.

IN our last we promised another notice of the valuable work before us, and now proceed to submit it to our readers. The next subject that claims consideration is, the pathology of parturient convulsions. This formidable and fatal disease has long engaged the attention of obstetricians; was generally ascribed to congestion, or effusion of blood, in the brain, and therefore copious depletion was recommended. In 1823, Dr. Ryan and Mr. Ashwell stated, in their respective works, that one form of convulsions was purely nervous or eclamptic, and was to be cured by sedatives, though many celebrated teachers had declared that opiates were destructive in all cases of this disease. Most of the French obstetricians maintain the opinion, that the disease may depend on disorder of the nervous energy, as well as on cerebral congestion, or inflammation. Dr. Ramsbotham is also of this opinion, for he thinks, in many instances, the brain is affected by sympathetic irritation, "because, upon very minute investigation after death, little or no change in cerebral structure has been detected." He thinks the pathology of the disease unknown; but inclines to the belief that gravidity is connected with the exciting cause. He advises copious depletion in the majority of instances. When the disease occurred after delivery, he has observed it more fatal than before or during parturition. Copious depletion, arteriotomy, clysters with assa-

fœtida, and oil of turpentine, are the chief remedies. The exhibition of opiates, or stimulants, is justly exploded; unless, we beg to add, the disease is nervous or eclampsic, when these only, and not depletion, will remove the disorder. Several cases are related in which bleeding and artificial delivery secured the patients, and several in which death took place.

In speaking of twin labours, our author advises the membranes of the second fœtus to be ruptured in an hour or two, when no uterine action occurs, either with the finger or a stilette, and if the uterus do not act after the escape of the liquor amnii, Dr. R. recommends the operation of version or turning. We cannot assent to this practice when the presentation is natural, because the judicious use of the secale cornutum will excite labour and effect delivery. If even the feet or breech presented, the same remedy might be given; but if the fœtus were in a transverse position, then version would be indispensable. The other diseases described are retroversion and polypus of the uterus, with cases in which we find nothing novel.

This volume contains reports of many dangerous cases which will be perused with interest by every practical obstetrician.

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#### IMMEDIATE RELIEF OF TOOTH-ACHE.

*An effectual remedy for Tooth-ache when the disease is caused by caries or decay.*

By DR. RYAN.

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IT is now some months since I published, in this Journal, that the application of pure nitric acid to a carious tooth procured almost immediate relief of tooth-ache and face-ache, without producing the slightest pain. The acid must be applied to every part of the decayed surface, and care taken not to suffer it to touch the gum, cheek, lips, or apparel. The mouth should be washed after the application with tepid water. It is much easier

to touch the teeth in the lower than in the upper jaw; and I have never known a single instance in which the acid was fairly tried, and completely applied to the decayed surface, without procuring almost immediate relief, and without any pain. When the upper teeth are diseased, it is very difficult to touch the nerve in a small opening, and this is the cause of failure. The remedy may be employed however delicate the patient, even to children and pregnant women. My object in reminding the profession of it, is the frequency of the tooth-ache at present.

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#### THE INDEPENDENT PHYSICIAN'S PETITION TO THE HOUSE OF COMMONS,

Asking for and certain to obtain Medical Reform.

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*To the Editors of the London Medical and Surgical Journal.*

GENTLEMEN,

PERMIT me to claim a small space in the columns of your Journal to repel a charge, which has, I am informed, been repeatedly preferred against me and my brother petitioners in some influential circles. Whatever indifference I may feel, on my own account, towards the authors of such unfounded charges, I cannot, in justice to my generous colleagues, suffer the accusations wholly to escape notice. It has been insinuated, that we misrepresent facts, and have, moreover, shown a want of proper respect to the Fellows of the College of Physicians, by applying in the first instance to the House of Commons. Instead of taking this uncourteous method to obtain redress, we ought (they say) to have submitted our petition to the college, and waited their reply, before ulterior measures were resorted to. These, and even greater attentions, it is asserted, were due to an ancient corporation, established by law, for the honour of the medical profession, and benefit of society. Waving these common-place endeavours to bolster



up a bad cause, declining also to inquire into the pretended obligations of the faculty and the public, to rulers, whom neither the law nor *their own* superior merit placed over their brethren, I shall confine my observations to the asserted indelicacy of our course in neglecting the fellows, and proceeding at once to lay our grievances before the legislature. To me, the House of Commons appears to be the eligible tribunal, and the opinion is in strict accordance with all that I have heard from gentlemen learned in the law. Therefore, in preferring our complaints, and submitting our wrongs directly, and at once, to the most competent court, I cannot bring myself to believe, that we have acted un courteously to the fellows, or laid ourselves open to the charges that have been advanced against us. Surely it might have been reasonably expected, that the injured would seek for redress where they were most likely to obtain it. While advocating their pretensions, in a constitutional and becoming manner, the opposing party have no just cause to complain. As subjects, entitled to equal protection, in the eye of the law, with the fellows themselves, the sufferers, in bringing forward their grievances, only exercised an inherent privilege, the undisputed right of every Briton. With these few remarks I might safely close the discussion, leaving its ultimate decision to the good sense and unbiassed judgment of your readers: but even this thin veil, this flimsy covering, is torn asunder, by the disclosure in the subjoined letter.

After waiting a long time, the trial being over, for some liberal movement, some prospect of relief to my oppressed order, I endeavoured to rouse the fellows to a sense of their perilous situation, by sending to them the following letter. As they suffered it to remain unanswered to the present time, their silence has more than released the petitioners from every obligation, even supposing, that something could really be due to men, who not only usurped their places, but

have ever since set at nought the rights of the complaining party.

*"Holles-street, Cavendish-square,  
Sept. 28th, 1830.*

"GENTLEMEN.—I desire to apprise you, that ever since the complete failure of your prosecution against me, so long ago as the 3d of July, 1828, I have anxiously expected the voluntary repeal of your illegal and oppressive by-laws. As they now stand, they are equally injurious to medical science, and prejudicial to the highest grade of medical practitioners.

"The object of this address is to inform you, that unless your charter, received from King Henry the Eighth, (the only source of your authority) be speedily restored to its original purity and usefulness, applications will be preferred in the approaching winter, either to the courts of law, or to the legislature, or to both of them, for the purpose of obliging you to amend your by-laws, and make them agree with the letter and spirit of your charter.

"I have the honour to be,  
Gentlemen,

Your obedient humble servant,  
(Signed) "EDW. HARRISON."

*To the President and College, or Commonality of the Faculty of Physic in London, Pall Mall East.*

I shall conclude this hasty letter with the above remarks, and have the honour to be, Gentlemen, yours, &c.  
EDW. HARRISON.

#### EFFICACY OF CROTON OIL IN CHOLERA.

BY S. DOUGLASS, M.D., DIEPPE.

*To the Editors of the London Medical and Surgical Journal.*

GENTLEMEN,  
I OBSERVED in the *London Medical and Surgical Journal*, which you were so kind as to send me last week, a letter from the Inspector-General Tegart to the editors of that periodical, on the use of croton oil in cholera, in which he says, he has never

heard of that medicine having been resorted to, notwithstanding his repeated recommendations of it to his professional brethren, as well as to the Central Board of Health in London. I have not the pleasure of knowing Mr. Tegart personally, but I think it fair to assure him, that "croton oil" has been used in this country, and with great benefit, in cholera; but I am sorry to say not in the stage of the disease in which he took it; on the contrary, in the only case in which I saw that medicine used whilst the irritability of the stomach existed, it was injurious. The instance Mr. Tegart speaks of, in which the oil was given, was his own; he recommended it "from the decided success I witnessed of its utility in yellow fever, and other diseases in the West Indies, bearing a strong resemblance, in many of its leading symptoms and appearances after death, to those of the epidemic cholera." I spent some years of my life in the West Indies, and saw very many cases of bilious remittent fever, which I suppose he means when he speaks of "yellow fever" (the typhus icterodes) being a very rare form of the disease; and I must say, I cannot recognise the slightest resemblance between the two diseases. And I very much fear, if the public are induced to use "croton oil" in bilious affections, which they may be taught to believe resemble epidemic cholera, they will find the remedy unsuccessful. Mr. Tegart was successful in his own case, but it is remarkable that the "croton oil" is the only medicine had recourse to, at least no other is mentioned. I confess I see danger in the publication of such a case: coming from such authority, it must have great weight with the public, who, in their terror of the disease, fly eagerly to any remedy, however ridiculous or however violent, which they imagine may save them; and I think it would be a most acceptable service if you, who have paid so much attention to it, were to place the value of the croton oil in its proper light before the pub-

lic. It is melancholy to see the effect of fear about this disease; every disagreeable sensation arising from indigestion—every slight bilious diarrhœa, which last year would have been regulated by abstinence and mild aperients—now presents itself to the minds of the patients as the first inroad of this dreaded disease; and if they believe that "croton oil" will cut the matter short, they will try it themselves without any reference to a medical adviser, and the consequences will be fatal.

Four months before Mr. Tegart's case occurred, I had exhibited croton oil in spasmodic cholera, with decided success, in Paris. I was attached by the French government, immediately on the breaking out of the disease, to the 11th arrondissement. Whilst in attendance there at eleven o'clock, on the 21st April, I was requested, by two young professional friends, to visit a Mr. F., residing at No 26, Rue des Brodeurs. This case, in which the croton oil was successfully used, was published by one of the gentlemen, an intelligent pupil of the *École de Médecine*, in the *Gazette des Hôpitaux* of the 29th of May last. Perhaps it would be as well briefly to recapitulate it to you. The patient presented the following symptoms:—His eyes were sunk; the extremities and tongue cold; the pulse at the wrist tremulous; his face, hands, and forearms were of the bluish hue; he complained of violent cramps in the abdominal muscles, and in those of the inferior extremities, and as if a bar of iron was pressing heavily across his chest; he had vomited a quantity of greenish matter, but his evacuations, of which he had had ten from eight o'clock, were like rice-water, and he spoke with a dry whispering voice.

The violence of the vomiting was alleviated by laudanum, and the diarrhœa completely stopped by an enema containing ten drops of the laudanum of Rousseau. Mustard sinapisms were applied to the calves of his legs, and bottles, containing hot water, were placed round him. To-

wards evening he was becoming comatose, and was then ordered a table-spoonful of punch, with three drops of spirits of ammonia every ten minutes; re-action was brought about, and he was bled to eight ounces: he relapsed. At seven, Professor Chomel, of the *Hôtel Dieu*, one of the most scientific physicians in Paris, met me in consultation; he considered the case hopeless, but thought the application of the "vesicatoire rachidien" to the spine might be tried. In addition, five grains of calomel and camphor were given, and he was put into a hot bath. Whilst in the bath, he passed a little urine, the first time since the commencement of the attack. On his being taken from the bath, an enema of castor oil was administered, and he was ordered two grains of calomel and two grains of capsicum every hour. His night was restless and disturbed. On visiting him next morning, I learned no evacuation had been procured. Those parts of the body where the stimulating applications had been applied, had their temperature somewhat increased, but the rest was cold; the pulse at the wrist was imperceptible; at the axilla, very feeble; the breathing more and more laboured; he was quite comatose. Finding the abdomen disturbed, I determined, as a "dernier ressort," to give him two drops of the croton oil by the mouth, and a teribinthinate enema; the result was most happy. In about fifteen minutes after the oil had been given, he vomited a quantity of greenish matter, and shortly after a copious evacuation was passed. The heat quickly rose, and the pulse at the wrist became perceptible; in two hours perspiration broke out. He subsequently exhibited typhoid symptoms, which I left to the management of my young friends, and Mr. F. is now attending the duties of his office.

I shall relate another case to you. Passing over the "Pont Royale," I observed a middle-aged woman, respectably dressed, being assisted by two men to rise from the ground. A

crowd had collected, but they stood at a respectful distance. The poor woman had been seized with violent vomiting and cramps, and had fallen; the attack was instantaneous, like a clap of thunder; she was nearly bent double from the torture; the colour of the face and hands had already changed. I begged her to go to the hospital, but she refused, and requested to be taken home. Whilst they were preparing a chair to carry her in, I went to an apothecary's and procured a draught of laudanum, camphor, and spirits of ammonia, which I gave her before she was removed. I attended her home, and had her surrounded with bottles of hot water, and well rubbed with mustard on the abdomen, and inside of the legs and thighs. The vomiting and purging were soon stopped, but she sank rapidly. All the strongest marked symptoms of cholera were present; she was ordered calomel and capsicum every hour, but without effect. At six P.M., I believed her minutes to be numbered: the pulse was imperceptible and she was insensible. I then put two drops of the croton oil on her tongue; in ten minutes she was seized with convulsions, and violent vomiting and purging of green bilious matter; perspiration, with but little heat, broke out, but the pulse at the wrist could be felt; small, but frequent doses of hot brandy and water were given; re-action was fully established by midnight, and she recovered.

In addition to these, I have given the croton oil with the same advantage in four cases, but always in the last stage, when the powers of life were but glimmering, never when the stomach showed great irritability. The case where the croton oil did harm, was one in which the vomiting and purging had not been stopped; the effect was extremely violent, and the patient died almost in the act of vomiting.

I am convinced that croton oil is a valuable "dernier ressort," but it should not be given till everything

else has failed; certainly not whilst there is either vomiting or purging. A great deal of terror still exists both in France and England about this disease. There is no doubt greater cause for alarm in France than in our own country, from the nature of the diet of the people, which is on vegetables, fruit, and sour wines. The value of the roast-beef-diet was never more conspicuous than in Paris during the rage of the cholera. Whilst the French were dying at the rate of 1000 a day, scarcely an Englishman was attacked; I believe not more than from 25 to 30 died of the disease in Paris. I can attribute the difference to nothing but the different mode of living, and perhaps of medical treatment. The practice of the French physicians is too inert for our countrymen, and I must confess that our doses must be moderated to meet the systems of the French. The physical powers, however, of the two people are different; there is more strength of constitution in the English.

I think you will agree with me in saying, the public may be assured, from experience, that when moderate care and attention is paid in the early stage, there is very little danger to be apprehended; but they should be cautioned, in every possible way, against the belief in specifics; there are no such things; we have none such; the symptoms must be treated as they present themselves. I have seldom seen the case of a person of regular and temperate habits, who called in advice upon the appearance of the premonitory symptoms, terminate fatally. I have found, in the early stages, leeches to the pit of the stomach, small doses of calomel, capsicum, and opium, alternating with Gregory's mixture, very serviceable.

As to the question of contagion, I think it worse than useless to moot it. If the disease is communicable, free air, cleanliness, and good wholesome diet, with a fearless mind, are the best guardians against it; in proportion as any of these are wanting, the

predisposition to any epidemic may arise.

You are very welcome to make what use you please of the cases.

Dieppe, October 7, 1832.

## SURGICAL OPERATIONS.

By MR. BRODIE.

### TREPANNING.

WHEN blood is effused underneath the bones of the cranium, between them and the dura mater, the operation of trepanning is requisite, and also when there is a simple fissure of one of the bones without depression, and when there is depression; when matter is between the bone and dura mater, this being shown by the pericranium being raised over the part of the bone, beneath which the matter is situated. The cases, in which trepanning is required without any personal injury, are very rare. In performing this operation, first make an incision through the skin and occipita frontalis muscle, down to the bone, either of a crucial or semi-lunar shape, or if there is a wound already, it may be enlarged; examine and see if there are any splinters of bone, and if there are remove them. There are two different kinds of saw used in the operation of trepanning. The circular saw, or trephine, and the straight saw, or Hey's saw. The trephine consists of two parts, the centre pin, and the circular saw surrounding the centre pin; the teeth of the saw of the trephine should be wide, turning alternately inward and outward; the use of the centre pin is to keep the trephine fixed until the saw has made a sufficient groove for itself in the bone. The centre pin ought always to be fixed on a sound piece of the bone, as otherwise, if fixed on the depressed portion of bone, you may depress it still more.

The patient should be in bed, with his head raised by a pillow, and a board placed under the pillow; the surgeon should be at the head of the

bed, and an assistant should steady the head. Do not touch the dura mater, as it may cause the death of the patient; for if only scratched, it will slough, and if it is perforated, ten to one but the patient dies. Fracture of the outer table of the bone is never even with fracture of the inner table. The fracture goes off in an oblique direction; and the fracture of the inner table is more extensive than that of the outer table. When you saw through the outer table, saw boldly, but when you search the inner table of bone be more cautious, as here and there it is thinner than at other parts, owing to the pressure of the convolutions of the brain, and at one part of the circumference of the saw, the trephine may be nearer the dura mater than at another.

When the bone is dead, and the dura mater is separated from it, there is in general no hæmorrhage, but in some cases great hæmorrhage occurs. The operation of trephining should not be hurried, as there is always plenty of time for it. Do not wait for the bone being perforated all round the circumference, as at one part it may be perforated and at another part not; where it is not perforated, the elevator may be used. There are splinters sometimes left on the inner margin of the bone; some surgeons remove these, but Mr. Brodie does not: if there is any depressed portion of bone around the circumference, it may be raised by the elevator.

Blood is in general effused under the bone in the neighbourhood of the middle meningeal artery. Wherever there is suppuration under the bone there is in general a puffy tumour above the scalp, marking its place and situation. You should not trephine over the frontal sinuses, but if the operation be necessary or requisite, expose the interior of the sinuses by sawing through the outer table, and afterwards saw through the inner table down to the dura mater. You should not trephine over the longitudinal

sinus, nor over the longitudinal or transverse sinuses of the occipital bone. Where there is much extravasation under the bone, you should trephine in three or four distinct places. After the application of the trephine, the dura mater may slough, and the brain may push out, thus forming a hernia cerebri, and this is one reason why the operation of trephining should be very cautiously performed. After trephining, you should treat the dura mater very mildly, and not touch it by any means. Approximate the edges of the wound together, but not quite close together, in order to allow for the escape of any matter that may form.

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## Hospital Reports.

ST. THOMAS'S HOSPITAL.

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### HYDROPS OVARII.

#### *Ulceration of the Rectum.—Functional Disorder of the Heart.*

ELIZABETH MYSTON, aged 52, a servant, was admitted into Elizabeth's Ward, of this hospital, Sept. 20th, under Dr. Roots, for an enlargement of the abdomen, which she states she has had for five or six years. It began to increase in size first at the lower part of the right side, and gradually extended over the whole abdomen. At the present time it is about the size of that of a woman in the last month of utero-gestation. Has never experienced any pain or uneasiness, but only occasionally a sensation of weight. A month ago, she was seized with rigors, or shiverings, and purging, accompanied by pain in her loins, extending to the right thigh, which was numb. There is considerable pain, caused by pressure over the whole abdomen, especially the lower part of the right side, and a tumour, which has a cartilaginous feel. There is vomiting after the ingestion of aliment. Previously to the swelling, menstruation had not occurred for six years and a half. About six months since, the cata-

menia re-appeared. Has no appetite; bowels relaxed; alvine dejections yellow; pulse small, and rather sharp; urine scanty, and high coloured, also albuminous; tongue red, and glazed. Sometime ago, she states she had ague, succeeded by a severe attack of rheumatism.

20. *Hirudines* xxiv. *abdomini et postea cataplas. furfuris. Acid. hydrocyanic* ℥ij. *6tis horis. Opii* gr. ss. *6tis.*

Milk diet,—arrow-root and sago.

21. Slept rather better; vomiting still continues; pain in the abdomen but little relieved by the leeches.

*Hirudines* xiv. *abdomini.*

22. Scarcely got any rest the whole of the night; vomits every thing; pain in the abdomen relieved by the leeches; purgation continues; every thing she attempts to take upon her stomach aggravates the diarrhœa.

*Cataplas. sinap. epigastrio. Acid. hydrocyanic.* ℥ij. *6tis. Mist. cretæ comp.* ℥ij. *6tis. Emp. canth. lateri dextro abdominis.*

Beef tea [bj. daily

23. Sickness continues; excessive languor, with prostration; diarrhœa better; mouth very dry, slept pretty comfortable.

24. Feels very sick and faint; ejects every thing from the stomach; diarrhœa continues.

*Pulv. kino comp. gr. v. Atis vel sextis horis ugenti diarrhœâ.*

*Fin. rubri* ℥iv. *quotidie.*

25. Countenance much improved; feels in every respect much better, which she attributes to the wine; mouth continues rather dry; vomiting and diarrhœa better; bowels open once since yesterday; complains of pain at the inferior part of the right side of the abdomen.

26. Much the same as yesterday; the wine continues upon her stomach better than anything else.

*Fin. rubri* ℥vj. *quotidie.*

29. Vomiting worse; pain again present in the abdomen.

R *Acid. hydrocyanic* ℥iv. *6tis ex haust. efferves. e tinct. opii* ℥v.

*Cataplas. sinap. epigastrio, quotidie.*

The kino to be continued, if necessary.

Oct. 1. Has incessant vomiting; complains of pain all over the abdomen. Bowels open twice in the 24 hours; rest disturbed; tongue very red; great emaciation of the body has taken place; weakness excessive.

*Pergat. in usu haust. efferves. pulv. kino gr. v. in pil. pro re natâ, si diarrhœa urget. Brandy,* ℥ij. *daily.*

2. Vomiting a little better; bowels more comfortable; eyes appear sunk; restlessness continues.

3. Has a good deal of uneasiness and pain down the right side.

*Hirudines* xij. *abdom. et postea emp. canth.*

Vomiting subsided. The effervescing draught to be discontinued; two eggs daily.

4. The blister and leeches acted well, but has experienced but little benefit from them; diarrhœa worse; cannot sleep. As soon as the diarrhœa came on, she took one of the kino pills. The abdomen appears less and more flaccid than it has hitherto been since her admission.

6. Has been very restless since yesterday afternoon; did not close her eyes the whole of the night, which appear very much sunk in their sockets; diarrhœa better; she appears sinking fast.

Four o'clock P. M. Constantly calling out for assistance, her voice being scarcely audible. She has continued to sink, and at half-past six o'clock death terminated her sufferings.

*Sectio Cadaveris*—Contents of the thoracic viscera healthy, except some apparently old adhesions about the pericardium. Upon opening of the abdomen, about a quart of fluid was found in that cavity. The peritoneum was found every where thickened; stomach, duodenum, and small intestines healthy; the ascending portion of the colon much diseased, and firmly adhered to the right ovary. The coats were so thin that they could not be separated without laceration. Both ovaries were much diseased, the right larger than the left, and consisted of

several cells; the anterior cells of the right ovary were much the largest, and contained about a quart of fluid. The other cells were of different sizes, and each contained a different kind of fluid. The left ovary contained about two pints of a sero-purulent fluid, which had a considerable quantity of oil swimming upon its surface; and flakes of matter somewhat resembling that which is deposited in scrofulous abscesses; coats of ovaries much thickened: that of the right was nearly cartilaginous; kidneys healthy. An abscess was situated between the uterus and rectum, but the latter was too far decomposed to ascertain whether it communicated with the former or not.

James Hyde, a phthisical-looking boy, aged 16, of diminutive stature, a felt maker, who also had been accustomed to carry heavy loads, states that he has been ill for three months, admitted, September 13th, in Jacob's Ward, under Dr. Elliotson. Was first attacked with cold shiverings, succeeded by slight heat of skin. About two months since was seized with acute pain in the region of the heart, accompanied by violent palpitation, from which he has suffered ever since, as also with dyspnœa. States also, that he has been troubled with a cough, and used to expectorate a good deal of mucus, which was thick and of a yellow colour. Has, at the present time, slight cough, and expectorates a little in the morning. The action of the heart may be heard all over the chest, especially the sound of the left ventricle, action of which is very strong and loud. A fine sawing sound can be heard opposite the ensiform cartilage. Has also dyspnœa, which is greatly increased on going up stairs; pulse rather strong, beats simultaneously with the left ventricle. Lies best upon the right side. Appetite pretty good; bowels regular; tongue rather redder at the tip than natural.

*F. S. ad 3vij. hydrarg. submuriat gr. ij. bis die.*

18. Feels much easier. Has not felt any pain since the 15th. Dyspnœa and palpitation less; mouth not affected with the medicine.

22. Continues to improve; pulse small and feeble, 80; mouth very sore; breath rather short. Calomel discontinued.

*Hirudines xij. regio cordis.*

25. Has much improved since he came into the hospital. Pain entirely left his chest; dyspnœa better; mouth nearly well. Still, however, there is greater action of the heart than natural. The left side of his chest appears more prominent than the right; pulse small, irregular, 66; countenance improved. Medicines discontinued; milk diet.

28. Cough nearly gone; palpitation decreased; feels himself in every respect much better.

*Hirudines xij. reg. cordis alternis diebus.*

Oct. 3. Has continued to improve since last report. At the present time he feels himself perfectly well in health; but if he walks quick, or runs, he then finds his complaint much aggravated.

5. Still improving.

8. Erysipelas came on this morning in the left side, after the leeches had been applied, consequently they were discontinued; in other respects he appears much the same as on the 5th.

12. The erysipelatous inflammation has subsided; action of heart less; feels perfectly well in health; house diet.

15. The action of the heart still diminishes. He continues perfectly well in health. The medicines have been discontinued since the 12th.

18. Impulse of the heart rather stronger than natural. The boy, finding himself perfectly well, wished to go home: therefore he was discharged.

[This was one of those anomalous affections alluded to by the illustrious Laennec, and was termed "Morbus Cordis" in the Clinical Report.]

## NEW REMEDY FOR CHOLERA.

*To the Editors of the London Medical and Surgical Journal.*

GENTLEMEN,

AMONGST the various remedial agents that have been proposed in cholera, in its most fearful stage, the state of collapse, one has been suggested by my worthy and intelligent friend, Dr. Hancock, in his scientific and able treatise on that disorder, which is worthy of particular attention, and cannot be too generally made known to the profession. I allude to the administration of nitrous oxide gas, which from its peculiar power in exciting involuntary muscular action, is very satisfactorily indicated when all other means of restoring the vital energy have been found inefficient.

It is a matter of satisfaction, that this opinion, which Dr. H. was led to form, from his successful experiments in the resuscitation of rats and other animals from a state of asphyxia, induced by drowning and carbonic acid gas, has been borne out by actual experiments on patients in the fearful state of collapse in this dreadful disorder, as appears by the following extracts from a report, delivered to the Central Board of Health, from the medical officers of the Cholera Hospital at Portobello. "In two cases of collapse, inhalation of nitrous oxide gas was tried, and, from the flushed state of the countenance and increase of the pulse, it was thought well of, but want of sufficient means prevented a continuance of the remedy, and the patients sank. We, nevertheless, felt convinced, that a perseverance in this practice would have been attended with the most beneficial result, and we can recommend no remedy so likely to resuscitate the patient from the collapse stage."

The only difficulty that can militate against the employment of this remedy is, that from the time required in its preparation, it could not be always available; but this objection would rather apply to its administration by the private practitioner, than where the available resources of a

public hospital are at command; and in this case, where there is every facility for trial, it is worthy the especial notice of the medical officers. It is best obtained by the decomposition of nitrate of ammonia; and where this is carefully effected by a well-regulated heat, there is no necessity for it to remain longer than one hour over water, as there is, in this case, little fear of the formation of any portion of nitrous acid. The liquefaction of the gases, by pressure, discovered by Dr. Faraday, has, however, opened a source by which it may be rendered still more available, should its efficacy as a remedial agent be established; as, by having it in a liquid state, readily volatile on a slight increase of temperature, it would easily admit of general application. I trust shortly to be enabled to submit to the notice of the profession the successful results of experiments, in which I have for some time been engaged, by which this, as well as various other gases, may be obtained in a condensed form, eligible for medical purposes, and available as articles of commerce.

Should trials prove the utility of this remedy, not only in cases of collapse, but also in others of suspended animation, this may tend to revive the unjustly exploded practice of pneumatic medicine, which, notwithstanding it has almost sunk into oblivion, nevertheless presents a series of remedial agents, capable of extensive application, when this shall not be founded upon empirical practice, but based upon the more refined views which chemical pathology must disclose. The able treatises of Dr. Stevens and Mr. Prater, and the researches of Dr. O'Shaughnessy, already fill up a considerable hiatus in that chasm; and when the concatenated energies of men of scientific exercises are devoted to the subject, there is little doubt but much more may be eventually accomplished.

I am, Gentlemen,  
Your obedient servant,  
ARTH. BOOTH.

London, October 22, 1832.



## INTELLIGENCE.

THE University of Erlangen has conferred an Honorary Degree in Medicine on Dr. Sigmond, as Secretary to the Medico-Botanical Society of London.

## BOOKS.

ADDRESS delivered at the Opening of the Medical Session, in the University of London, October 1, 1832. By John Elliotson, M.D. Cantab. F.R.S., &c. &c. 8vo. pp. 16. Longman & Co.

A candid, liberal, and independent Address.

Observations on the Powers and Effects of Cold as a Cause of Disease; with some Remarks on the best means of preventing its Morbid Effects, &c. By John Clendinning, M.D. Edin. and Oxford, Fellow and Censor of the Royal College of Physicians, &c. (From the London Medical and Physical Journal.) pp. 39.

This is an elaborate, scientific, and instructive essay. We shall notice it at our earliest convenience.

An Essay on the Nature and Treatment of Asiatic Cholera. By George Erving Winslow, M.D., Master of Surgery of the University of Glasgow, Fellow of the Royal College of Surgeons, London, &c. New York, 1832. 8vo. pp. 70.

A sensible, candid, and correct account of the nature and treatment of cholera.

## NOTICE TO CORRESPONDENTS.

*Tanjorensis* in our next.

*Crisis* is too personal, and his production libellous.

J. O. E.—If our correspondent wishes to favour us with communications, we beg him to furnish his manuscript in a form that some one or other can decypher it.

*A Student of St. Bartholomew's* has no reason to complain.

*Dr. Hancock*.—The manly and noble sentiments contained in our correspondent's letter, on the absurdity of holding truth to be a libel, are too strong and political for insertion. They are in accordance with the spirit of Trans-Atlantic liberty; and in this spirit the following passage is penned.—“I consider that the profession, and all honest men, are deeply indebted to your bold and meritorious exertions for the correction of abuses, and for the common weal; and we are bound to support you in a manner very differently from what has been hitherto done.”

The members of the profession, who consider the damages awarded in the case of *Ramage v. Ryan* excessive, have commenced a subscription to enable the defendant to apply for a new trial, or defray his expenses.

SUBSCRIPTIONS RECEIVED.	£	s.	d.
Dr. James Johnson . . . . .	10	10	0
Dr. Uwins . . . . .	2	2	0
Dr. Tweedie . . . . .	5	5	0
W. B. Costello, Esq. . . . .	5	5	0
A. C. Hutchinson, Esq. . . . .	2	2	0
J. P. Holmes, Esq. . . . .	2	2	0
Greville Jones, Esq. . . . .	2	2	0
— Skey, Esq. . . . .	2	2	0
A Naval Surgeon . . . . .	2	2	0
J. Foote, Esq. . . . .	1	1	0
M. W. Henry, Esq. . . . .	1	1	0
Dr. Harrison . . . . .	10	10	0
Dr. Blicke . . . . .	5	5	0
Morgan Austin, Esq. . . . .	2	2	0
A Dresser of St. Barthol. Hospital	2	2	0
E. L. Devonald, Esq. . . . .	1	1	0
P. Reilly, Esq. . . . .	1	1	0
Alex. M'Nab, Esq. . . . .	1	1	0
M. D. . . . .	2	2	0
Dr. Hood, Brighton . . . . .	5	5	0
W. Hughes, Esq. . . . .	1	1	0
W. F. Crump, Esq. . . . .	1	1	0
A Lady . . . . .	2	2	0
J. Ingleby, Esq. . . . .	1	1	0
Professor Cooper . . . . .	2	2	0
E. A. . . . .	5	5	0
An Hospital Surgeon . . . . .	5	5	0
Dr. Sigmond . . . . .	5	5	0
M. Downing Darwin, Esq. . . . .	1	1	0
A Country Surgeon . . . . .	1	1	0
G. . . . .	1	1	0
Sir Charles Aldis . . . . .	1	1	0
Dr. Aldis . . . . .	1	1	0
G. Jewel, Esq. . . . .	1	1	0
T. Radford, Esq. Manchester	2	2	0
A. . . . .	1	1	0
Dr. Graves, Dublin . . . . .	1	1	0
Dr. Montgomery, ditto . . . . .	1	1	0
Dr. Leahy . . . ditto . . . . .	1	1	0
Dr. Harty . . . ditto . . . . .	1	1	0
Dr. Apjohn . . . ditto . . . . .	1	1	0
Dr. Stokes . . . ditto . . . . .	1	1	0
Dr. Fergusson . ditto . . . . .	1	1	0
Dr. Collins . . . ditto . . . . .	1	1	0
Dr. Breen . . . ditto . . . . .	1	1	0
Dr. J. Labatt . ditto . . . . .	1	1	0
Dr. Colles . . . ditto . . . . .	1	1	0
Dr. Churchill . ditto . . . . .	1	1	0
Messrs. Hodges & Smith, ditto	2	2	0
A True Friend . . . . .	1	1	0
W. D. Mayne, Esq. . . . .	1	1	0
S. Cusack, M.D. . . . .	1	1	0
J. H. M.D. . . . .	1	1	0
John Mahony, Esq. . . . .	1	1	0
W. J. Rose, Esq. . . . .	1	1	0
Dr. Copland . . . . .	1	1	0
A Friend . . . . .	1	1	0
A. B. . . . .	1	1	0
Dr. Hope . . . . .	1	1	0
Professor Lizars . . . . .	1	1	0
Dr. J. Watson . . . . .	1	1	0
Dr. T. Watson . . . . .	1	1	0
W. J. S. . . . .	1	1	0
Amicus Justitiæ . . . . .	1	1	0
W. Terry, Esq. . . . .	1	1	0
Dr. John Hancock . . . . .	2	2	0

## LECTURES

ON THE

## PRINCIPLES, PRACTICE, &amp; OPERATIONS OF SURGERY,

Delivered at the University of London,

SESSION 1832—1833,

BY

PROFESSOR SAMUEL COOPER.

LECTURE V, DELIVERED OCT. 11, 1832.

GENTLEMEN,

TOWARDS the end of the last lecture, I spoke of the *buffy coat*, or *inflammatory crust*, an appearance commonly noticed on the surface of blood taken away for the relief of disorders accompanied by inflammation; but a few things, connected with the subject, were left unexplained. The buffy coat looks like size, or glue, spread over the surface of the crassamentum; and the blood in this state is therefore sometimes called *sizy*. Another peculiarity is frequently observed: the surface of the crassamentum is often concave, and, in technical language, the blood is then said to be *cupped*; that is, the centre of its surface is depressed, and the edges, or circumference, drawn inwards from the sides of the basin. We find, gentlemen, that when the buffy coat is thick and compact, there is always a proportional diminution in the firmness of the crassamentum. It would seem in inflammation as if there were a disposition in the blood to throw off its albuminous matter; and this is exemplified, as well in the body as out of it, considerable masses of coagulating lymph being thrown out on the surfaces of inflamed serous membranes, in the living subject, or into the cellular texture of other parts, which become swelled and distended by it. It has been ascertained that, in inflammation, the formation of the buffy coat is not confined to venous blood, but is formed, also, upon any

arterial blood that happens to be taken from the system for the relief of inflammation.

Thus, when in inflammatory diseases, on account of the youth of the patient, or the smallness of the veins, it is considered necessary to open the temporal artery, instead of a vein in the arm, the blood taken away will present the buffy appearance, just like what is seen on blood drawn, under similar circumstances, from the venous system. This fact was ascertained by Dr. Tweedie many years ago; and, in the case which brought it under his notice, the stratum of coagulating lymph formed so tough a layer, that it was preserved and exhibited for several winters to one of the medical classes at Edinburgh. In fact, when dried, it was like horn, so tough and compact was its consistence. The cause of the formation of the buffy coat is not well understood. Even Mr. Hunter's explanation is attended with difficulties. He says, that, in inflammation, the blood coagulates more slowly, and that consequently the red globules, which are the heaviest part of it, have more time to sink further from the surface, so as to leave the upper part of the crassamentum free from them: however, there is an objection to the receipt of this doctrine; because, if it were true that the globules descended from the surface of the crassamentum, merely by their own gravity, there would always be something like a buffy coat on the blood, in a minor degree, in its healthy natural state, inasmuch as time is always requisite for the completion of its coagulation. Also, when the blood does not coagulate at all, as is the case with that of animals chased to death, or killed by electricity or lightning, there is no buffy coat; so that the mere consideration of the descent of the red globules, by their own weight, in blood that is slow in coagulating, does not offer a satisfactory explanation of the fact.

Gentlemen, whether you are to practise in physic or surgery, the buffy coat merits your particular consideration; because it is, to a certain extent, a criterion of the existence of inflammation, and a vindication of the employment of means calculated to subdue it. You may be surprised to hear, that there should

ever be any difficulty in being sure of the existence of inflammation, after having been told, that it is accompanied by *redness, swelling, increased heat, and pain*; but the detection of it in all cases is not so simple a business as you may imagine; because inflammation occurs as frequently in deep-seated as in superficial parts. In many examples, it is completely out of the reach of ocular and manual examination; and then, if we should mistake the disease for some other requiring opposite treatment, the event might be serious: indeed, in numerous instances, the decision to bleed, or not, makes all the difference between life and death. This is a fact, which experience will soon convince you of.

Gentlemen, I wish now to explain how far the doctrine is to be received, that the buffy coat is a sign of inflammation; and, when you begin practice, and feel all the anxiety which is sometimes felt, respecting the question of blood-letting, you will then know the value of any information that will serve as a guide in the matter. This doctrine, then, is to be received with some limitation; for, though it be true, that the blood of persons suffering under inflammatory complaints, is generally *sizy*, yet experience fully proves, that the buffy coat sometimes occurs when no inflammation exists. Some kinds of fever and certain nervous disorders, attended with no traces of inflammation, and with a pulse not above 60, are accompanied by *sizy* blood. Again, the buffy coat is sometimes absent, when inflammation is unequivocally present. To establish the diagnosis, then, we must consider the concomitant symptoms; the degree of fever, the state of the pulse, the situation and kind of pain experienced, and the nature of the functional disturbance. These considerations, joined with that of the presence, or absence, of the buffy coat, will commonly enable us to form a correct judgment of the state and nature of the disorder. I must mention, however, one circumstance, which is highly important, if true, as is asserted by one of the professors at Edinburgh, namely, that though the blood may not always be buffy in inflammation, its surface is constantly excavated, that is, cupped, or, to speak more correctly, we might say, there is rarely excavation of the surface of the crassamentum, without inflammation. I saw something like a confirmation of this fact a few days ago, in the case of a young gentleman, at an academy a few miles from town, who had been accidentally stabbed in the back by one of his school-fellows. The first blood taken away by the lancet had the excavated surface, but no buffy coat, yet the pulse was 132, with severe symptomatic fever, so as to give rise to a strong suspicion of inflammation in the chest; but, as there was no cough, no pain in the side, and little oppression of the breathing, I considered, that all these severe symptoms might depend on inflammation of parts on the outside of the pleura. Now, at a subsequent bleeding, a thick buffy coat was formed on the crassamentum, though none

occurred on the blood which was first drawn. A concavity of the crassamentum, therefore, must be looked upon as a circumstance in favour of the existence of inflammation, though there may be no buffy coat. In doubtful cases, gentlemen, it is best to take away a few ounces of blood, in order to ascertain its condition: you may do this generally without risk, and thus acquire information of the greatest possible importance.

In some cases of inflammation, the symptoms are either obscure or essentially altered, especially in inflammations of deep-seated parts, where the redness and swelling are not manifest. The nature of the affection may then be correctly judged of by a consideration of the degree and kind of symptomatic fever present, by observing what functions are disturbed, by noticing whether there is a *sizy*, or buffy state of the blood, or whether it is cupped. Thus, in the case which I have just mentioned, I considered, that there was no inflammation of the lungs, or of the pleura, because there was no cough, no pain in the side, and not much disturbance of the breathing. Inflammations of deep-seated parts, like those of superficial ones, frequently produce swelling, redness, induration, suppuration, gangrene, &c. We may not be able to see all these things in the living subject; but we trace them in the body after death.

Gentlemen, in the last lecture, I specified redness, swelling, increased heat, and pain, as forming the most remarkable symptoms of inflammation; but you will remember, that these symptoms are not all constantly present, one or more of them being occasionally absent. A student, who pursues surgical knowledge with proper zeal and curiosity, will not be content with a simple knowledge of the fact, that these symptoms constitute inflammation; he will wish to know the cause of their appearance, and the manner of their production. The *redness* depends chiefly on the dilatation of the small vessels of the part, which become large enough to admit the red globules of the blood; but they are not merely dilated, they are forcibly injected,—there is a preternatural turgescence, a vascular congestion, or, as Andral chooses to call it, *hyperémie*. Some theorists suppose, that the extremities of the arteries, so far from being dilated, are affected with constriction and spasm, and that the increased redness depends on the small veins being distended with florid blood; but this is difficult to determine, for who is able to demonstrate where the capillary arteries terminate and the minute veins begin? Hunter supposed, that new vessels were sometimes produced, and that this circumstance had some share in causing the redness, which he did not ascribe entirely to the enlarged and turbid state of the old ones; but this cannot generally be the case. It is certain, that friction and heat will produce inflammation in a few seconds, and, in such cases, there is not time for the production of new vessels.

Many parts, naturally colourless, may be made red by fine anatomical injection; a fact

clearly proving, that the injection of the small vessels, already existing, with a greater quantity of blood than natural, will account for much of the redness. Inflammation reddens some parts which naturally have no appearance of vessels. This preparation, gentlemen, is an inflamed tendon, (*the learned Professor showed the preparation*); now, if this tendon had not been inflamed, the injection would not have penetrated its vessels, and reddened it in the manner you now see. Another preparation before us is a portion of inflamed intestine. Its vessels are vastly increased in size, and the dilatation of them renders some visible, which were not so previously; so that the number appears as if it were augmented. You can see enlarged vessels, in a common case of ophthalmia, quite as well as in any preparation which I can show you. The fact of the dilatation of the arteries of inflamed parts is clearly proved by examination with the microscope. One effect of inflammation is to deprive parts of their natural transparency. Here, gentlemen, is a preparation in which the tunica arachnoidea, one of the membranes of the brain, has been inflamed; in those places, where it passes over the convolutions of the brain, it may be plainly observed to be not only opaque, but much thicker than natural. The whole of it, however, is really in the same condition. Here is a portion of the pleura, which is considerably thickened, and has, moreover, on its inner surface, large quantities of coagulating lymph. These circumstances, viz. the dilatation of vessels, the loss of transparency, and the increased thickness of parts from inflammation, are well illustrated in a preparation in the Hunterian Museum, one put up by Mr. Hunter himself. He froze the ear of a rabbit and thawed it again; it became, of course, considerably inflamed. While the ear was in this state, the animal was killed: and the vessels of the head were injected. Now, the inflamed ear, after having been dried, was found to be opaque, and vastly thickened, and its vessels were considerably enlarged; but the other ear, when dried, retained its transparency, and its vessels were of the natural size.

*Swelling* is occasioned partly by the dilatation of the vessels, partly by the greater quantity of blood in those vessels, and partly by the extravasation of coagulating lymph. It seems also that the action of the absorbents in inflamed parts is retarded and interrupted, a circumstance that must have some effect in increasing the swelling. With regard to the increased *heat*, the thermometer does not always show it to be so high as the patient's description of his own sensations would lead us to suppose. By artificial means, Mr. Hunter excited inflammation in the chest of a dog, and in the abdomen, rectum, and vagina of an ass, without being able to detect any increased heat. However, in a patient who had been operated on for hydrocele, the temperature of the part, which on the first day was 92°, was, on the following day, 98½°,

which was as great a difference as could possibly have been anticipated. The heat of the body is generally in proportion to the velocity of the circulation; and on this principle attempts have been made to account for the increased heat in inflammation; but modern observers occasionally find a difference in their relative proportions, for, in a person whose pulse was so slow, as only forty-five beats in the minute, there was an increase of temperature all over the body; and moreover it is declared, by Dr. W. Phillip, Dr. Hastings, and others, who have examined the vessels of inflamed parts with the microscope, that the current of the blood in them is sometimes even rendered slower. Perhaps, therefore, we are not justified in supposing increased velocity of the circulation to be essential to the process, by which an increase of temperature is produced.

Gentlemen, we now come to the cause of the *pain*. Is it owing to increased sensibility of the nerves of the part, or the unnatural circumstances in which they are placed,—the change in the parts to which they are distributed,—or because they are themselves inflamed? These are abstruse points, on which I shall not waste your time with speculations. The *throbbing* is sometimes said to depend on the strong pulsation of the arteries. John Hunter says, that not only the small vessels of the inflamed part, but also the large ones leading to it, have an increased action. Thus, in whitlows, the ulnar and radial arteries frequently beat with more than ordinary violence. These facts were laid hold of, by some reasoners, as proofs that the arteries dilated and contracted preternaturally; but Mr. Hunter never ventured to make this inference himself; for all he presumes to say is, that where there is throbbing, it is not from increased contraction of the arteries, but from their undergoing a dilatation—an increase in their diameter. He compares the first act of the vessels in inflammation to a blush; afterwards there is a new action established, producing a separation of coagulating lymph, and also of serum, which is the cause of the soft swelling often noticed in the circumference of an inflamed part. I have already remarked, that serous membranes take on the adhesive inflammation more readily than mucous membranes. Serous membranes, when stimulated, readily throw out coagulating lymph, which frequently becomes organized. This takes place in the radical cure of hydrocele; the coagulating lymph, which glues the opposed sides of the tunica vaginalis to each other, becoming vascular. Adhesions of the pleura pulmonalis to the pleura costalis—of the heart to the pericardium—of the intestines to one another, or to the peritoneum—are likewise caused by this same process. Here, gentlemen, is a preparation of a heart, which is covered by a great quantity of coagulating lymph, a complete layer of it; and in this other specimen, the pericardium is seen to be universally adherent to the heart. In both

these instances, the pericardium may be observed to be much thickened. In the preparation which I now exhibit, you may observe a portion of lung, to which the pleura is adherent. Lymph has been effused, and it has become organized. The interesting preparation, to which I now invite your attention, exhibits a complete membrane-like layer of coagulating lymph, deposited on the inner surface of the dura mater, one of the fibrous membranes, as they are termed. In the preparation which I next present to you, is a layer of lymph on the inside of the trachea—a mucous membrane; it occurred in a case of scarlet fever, where laryngitis was combined with the other disorder. The preparation was taken from a patient who, I remember, was under the care of Dr. Pinckard at the Bloomsbury Dispensary. The next specimen before us shows thickening of the pericardium, and in another you may notice, that extensive adhesions have taken place between two portions of the intestinal canal.

Inflammation frequently renders parts more solid; here is a portion of lung changed in this manner; it is more like liver; or, in the language of medical writers, it is *hepatized*. Another preparation before us is rather curious—a tumour, having the character of fungus hæmatodes, has made its way through the parietes of the chest, and the pleura is vastly thickened; but I do not know whether it is in consequence of the irritation of the tumour or not. The next preparation which I come to, shows the great length of some adhesions between the pleura costalis and pleura pulmonalis. The vessels which pass into these adhesions, proceed from the intercostal arteries, and therefore are not new vessels, but continuations of the old ones.

Gentlemen, I have already shown you preparations, in which mucous membranes have thrown out fibrine, or coagulating lymph; but, for this purpose, the inflammation must have been very high, and of a peculiar kind, like that of croup. Here is another example to prove the fact: you will observe in the interior of this bladder, that lymph is thrown out over the whole of it, owing to great irritation brought on by strictures and retention of urine. The lymph, thrown out by serous membranes, is disposed soon to become vascular and organized, and then it is not absorbed again, as takes place with that thrown out in the cellular tissue, which is in general quickly removed. When vessels are produced in the lymph, they are not new formations, they are not generated, as it were, in the lymph, but are prolongations of the old vessels, as I have already explained; and they extend into the lymph, like the roots of plants into the soil.

One curious principle in inflammation, is, that it is always most violent next the external surface: it seems as if it had a constant tendency to spread outwards. The irritation of a bad tooth, producing inflammation about the alveolar process, causes great pain and swelling on the side towards the cheek, but little or

none on the inside of the alveolar process. This seems then to be one of the laws of inflammation, that it is always disposed to spread outwards, that is, towards the nearest part of the surface of the body, and the usefulness of this principle is frequently very evident; for when extraneous substances, or collections of matter, are lodged in the body, if the inflammation were to spread inwards, the mischief would be rendered worse, and a cure more remote: but, the inflammation, taking the direction towards the surface, is followed by changes, by means of which the extraneous matter is ultimately discharged.

I now invite your attention, gentlemen, to the *causes of inflammation*. They are divided into remote and proximate; the first being subdivided into predisposing and exciting. The human body is naturally susceptible of inflammation: if this were not the case, we should never recover from certain injuries and diseases: in this light it is to be regarded as a salutary process. In addition to this natural tendency, some constitutions have a greater propensity to inflammation than others; such disposition being often termed an *inflammatory* or *phlogistic diathesis*, which may be innate, but is much more frequently acquired by the habits of the individual, or by the influence of predisposing causes. The most powerful predisposing cause of inflammation is *plethora*, produced, in plain terms, by eating and drinking more than nature can well bear. This practice of living above par, and often at the same time in indolence, causes extraordinary fulness of the vessels, and renders the individual more subject to inflammation, and his inflammations more difficult of cure. The prodigious quantity of gin and porter which certain classes of persons, in this metropolis, drink, makes them bad subjects for inflammation: this is well known; indeed my own experience justifies me in saying, that draymen, coal-heavers, and other strong-looking, but intemperate, labourers, frequently die of slight injuries, from which other persons of more delicate constitutions, but less guilty of excess, would recover with facility and expedition.

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## CLINICAL LECTURES

DELIVERED BY

DR. ELLIOTSON,

Monday, October 22d, 1832.

### LECTURE II.

HYPOCHONDRIASIS — ONANISM — TEMPORARY IMPOTENCE: COLD BATH IN THIS DISEASE, AND IN HEMOPTYSIS — CHOREA — LARGE DOSES OF C. IRON — OBESITY — EVANESCENT CEPHALALGIA — CUTANEOUS DISEASES CURED BY ARSENIC — EFFICACY OF CROTON OIL — CHRONIC GASTRITIS — DISEASES OF THE HEART — BELLOWS AND WHISTLING SOUND — DYSENTERY AND RHEUMATISM.

In my last lecture I omitted to speak of one case that I had presented (or discharged). It

was that of a young man, admitted into William's Ward for hypochondriasis, and, as he stated, with slight hæmoptysis. When he came in, he complained of a number of diseases: a pain in one part one day, and a thousand others the next; his tongue was healthy, pulse natural, skin moist and comfortable. I could not discover any disease about him; in fact, I was not able to make up my mind whether he was shamming or not. But, although I could not find any thing the matter with him, I was inclined to think that he was not an impostor. When you are called to patients suffering from this disease, you will find, they will tell you, that they feel an extremely unpleasant sensation all over them, besides giving you a number of painful symptoms. It is ridiculous for you to think of curing this disease by giving a number of remedies, for they only create that alarm which will tend to aggravate the disease. The young man here, the other day, told me that one of his testicles did not roll over the other as formerly, and that they both hung down more than formerly. A great number of young men have this disease; and they generally complain to you of their sexual organs; some say they have too frequent emissions, and have not any desire to go with a female; others say they have great desire for coition, but during the coition can do nothing. Whether this arises from any unnatural gratification or not, I will not pretend to say. There are a great number of young men affected in this way, who cannot give any reason for it; others will be more caudid, and tell you they have done something of this description.

The treatment to be adopted is, to remedy any severe symptom that may present itself. If there is heaviness, or giddiness in the head, bleed them; if the bowels are confined, give them a gentle cathartic; besides this give tonics: the sulphate of quinine I have found an excellent remedy. Iron, also, is beneficial; but the cold shower-bath I have always found to do the most good. There are a number of cases that require no medicine;—they have no sickness, or any pain about them; pulse good, and their tongue healthy. In such cases I have always found the cold shower-bath cure every one. This man said he had spit blood: whether he had or not I was in doubt. I continued the use of the shower-bath just the same. A short time afterwards he did spit a little blood; there was no sibilous, sonorous, or crepitous rattle heard in the chest, therefore the cold shower-bath was continued. He had no return of the spitting of blood, but got quite well.

If there is not any pain or inflammation present, you generally have recourse to cold shower-bath, with a beneficial result.

A very remarkable instance of this kind occurred to me in private practice. A young man came to me for spitting of blood; he was much frightened, and told me that his brother also had been similarly affected for some time: both were consumptive; one, however, was

worse than the other, and died. The other, who had also an abdominal disease, used the cold shower-bath, both winter and summer, and even continued it during the hardest frost last winter\*. This one has not spit blood since, but at the present time enjoys good health.

If you have a patient who is suffering from stitch in his side, pleuritis, or any other acute inflammation, the bath, then, must not be had recourse to. Again; if from using the bath the person should become debilitated as not to feel that glow of heat which he should do after it, it must be discontinued; but you should then begin it tepid, and cool it by degrees, until he can bear the cold well. Under this treatment the young man got rid of his disease. He was admitted on the 26th Sept., and left the hospital on the 10th October. Then, for a tonic, I gave the sulphate of quinine, and, to regulate his bowels, gr $\frac{1}{4}$  of croton oil every night. I believe at the present time there is not another case of this disease in the hospital; but you will find it very common in young men, and I have no doubt see plenty in the course of the winter here. During the presence of the disease, I have observed that young men very frequently become impotent, but as the disease goes off this symptom leaves them.

Respecting the other cases that have been discharged, there are, first, two of St. Vitus's dance. This is a very common disease, and one which most frequently affects women and young people. The cases which I am going to speak of are both females, one nine years of age, and the other sixteen—the former, as you will observe, quite a child, the latter a very young woman. It is a disease entirely free from danger; I have never seen but one case that has died of it, and that was during my pupilage. It was a young woman who had been affected with it for two months, and then died of apoplexy. This disease is generally united with other diseases of the nervous system. If in the adult, and combined with paralysis, which sometimes is the case, or in the local form of the disease there are twitchings of the muscles of the neck and face, the disease scarcely or ever gets well. But when it arises constitutionally, or hereditarily, which sometimes we find the case, more especially in females, they generally get well. I have only seen one case of this kind that did not get well; this had existed two or three

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\* [We know a man, aged thirty-five, who has been spitting blood for ten years; and, nevertheless, goes into a cold bath daily throughout the year. He resides in the country at present; and assures us, that he always feels uncomfortable should any thing prevent him from taking his bath; and further, that he has frequently broken the ice on the pond which he frequents, in order to enjoy his favourite remedy.—Eds.]

years, and was marked by violent involuntary motion of the muscles of the neck, so much so, that from the constant drawing up and down of the chin upon the neck, the skin of the latter was entirely raw, where the chin rubbed against it. In severe cases, the patient cannot speak. I have even had three or four cases in this hospital, that required two or three to hold them, during the time they have been taking food, and then have been obliged to watch an opportunity to throw it into their mouths. I have been obliged to have other cases strapped to the bed, to prevent them from rolling off. This disease might get well without remedies, but it would continue a much longer time than if they were had recourse to. In any disease, if you have a remedy that would shorten it, you should always make it a rule to employ it, for you can never tell where it will end.

The predisposition to this disease is not obvious, for all children are liable to it. We sometimes find it affect a strong healthy child, and again, at other times, a debilitated one. It arises sometimes from fright, at other times it may arise without our being able to trace it to a cause. Neither can you discover what constitution it will affect, for, as I have before said, it sometimes affects the healthy, and sometimes the sickly\*. It is not a symptom of disease, but a disease itself; for, generally, in those affected with it, we can find no disease in the head, in the chest, or abdomen. The bowels are regular, and the stools healthy. The most frequent symptom of this disease is the twitchings of some of the muscles. The appetite is generally good, and there is every sign of health.

Of these two cases, one had no other symptom but the convulsive twitchings of her muscles; in other respects she was in good health. The other, who was sixteen years of age, had pain in her head, with drowsiness, which, in the first place, I removed by bleeding; afterwards I gave her some of the carbonate of iron, a remedy which, for this last three or four years, I have found very successful in this disease; after a short time the pain in the head returned, but the disease was not worse. I will not take upon myself to say, that this medicine has a specific power in this disease. The form that I generally give it in, is with treacle. I add double the quantity of treacle to the carbonate of iron, this makes it sweet, and much more palatable than taking it either in powder or pills, which is a very inconvenient mode of giving it; besides, children, we generally find, are fond of sweet things, and we can get them to take it in this way when we cannot get them to take it in any other form. This is a very harmless remedy, and you can never do any injury by administering it, providing you keep the bowels open. However, I generally find the treacle sufficiently purga-

tive to act upon them regularly. If it should produce any bad effect, from idiosyncrasy, or peculiarity of constipation, it is always owing to the folly of the patient, in not speaking of it when there is any pain in the head with heaviness. I have always found it give way to bleeding, low diet, and giving some purgative medicine. I took twelve ounces of blood from this girl, which relieved her. A short time afterwards I gave her half an ounce of the carbonate of iron three times a-day. A fortnight afterwards she again complained of pain in her head, which I did not take any notice of, but let her continue the carbonate of iron, and in a very short time the pain in the head ceased, which I have no doubt would not have disappeared if I had not bled her. But I knew I could make it go away, which I did by bleeding.

You must not trust to a spontaneous cure of any disease; if you have a remedy that will check it, you had always better have recourse to it than trust to nature. Many diseases may be remedied in the first place, which if you let them run on, may baffle your skill, and for ever after plague your patient; therefore it is right to remedy a disease immediately, if you can, or else you may be much disappointed from neglect, and the disease become incurable.

I have continually seen pain in the head go away under the use of the carbonate of iron. This girl's pulse was rather full: she took  $\frac{ss}$ . of the carbonate of iron three times a-day; was admitted into the hospital the 28th of August. On the 21st of September she was a great deal better; after she had been in three weeks, she had a return of the pain in her head, and continued the use of the iron. On the 21st it had entirely left her, as also had the disease itself. On the 18th of October I sent her out quite well. She took half an ounce of the carbonate of iron with one ounce of treacle, upon which she appeared to get fat.

The other case was that of the child, eight years of age, who had merely convulsive twitchings. I gave her immediately two drachms of the carbonate of iron every six hours. I admitted her on the 13th of September, and sent her out on the 18th of October perfectly well. This child also got fat upon taking the carbonate of iron. Now, whether the carbonate of iron fattens them or not, I cannot say, but if they have lost flesh, and in fact become emaciated, after taking the iron, they soon become fat. It has been observed, that the negroes become fat during the sugar season. It may be that the treacle had some effect, but the improvement may also result from the powerful tonic effect of the iron, by assisting the digestive organs, and rendering them more active in digesting the food.

The next case that I shall speak of, is that of a young woman, sixteen years of age, who had had lepra for seven years. This case is particularly worthy of your attention. The disease is a scaly disease, characterized by a spot of inflammation of the skin, covered by a scale,

\* [It often attacks children in schools, from the impression made by the affected.—Eds.]

and not by a watery vesicle, or pus. This disease generally occurs in young women, the cause of which I cannot trace, but we find it frequently brought on by drinking cold water, when the patient is in a perspiration. Again, it sometimes comes on without any obvious cause, it may appear six or seven times in the same individual, and last for different periods of time. This girl had it for seven years; she was a large stout girl, 16 years of age, as developed as an ordinary woman of thirty. When she came in her pulse was strong and full, skin hot, and she felt thirsty. Although she had it for seven years, it was in an active inflammatory condition. We find rheumatism in an active inflammatory condition after a long duration; so also we find cutaneous diseases. I bled her to twenty ounces; the blood was buffed and cupped. Her bowels being confined, I gave her half a drop of croton oil every night, and put her upon a diet of beef tea, milk, and bread. The liquor arsenicalis I have found the best remedy to give internally; I gave her *m. iij.* three times a day; it is always best to begin with a small quantity, about *m. ij.* or *m. iij.* for a dose, and gradually increase it, providing it does not create any sickness or uneasiness about the stomach. In this case I increased it up to *m. ix.*; there was no sickness, but she complained of pain about the epigastrium, for which symptom I bled her again to twenty ounces. This entirely relieved it; her thirst diminished, the irritation about the skin left her, and I presented her the 18th of October nearly well; so much so, that she thought it was useless to stay in the hospital any longer. I do not suppose the use of the arsenic would have done her any good without the bleeding, therefore I could not rely upon the arsenic by itself. The arsenic, however, appears to have a specific effect upon this disease, the same way as mercury acts upon syphilis; but here mercury will not cure the disease if any inflammatory symptoms be present, unless bleeding be had recourse to. So in cutaneous diseases, the arsenic will not act as a specific when the patient is in an active inflammatory condition, unless you destroy that condition by bleeding.

Another case, in the same ward, was that of a young woman labouring under chronic gastritis. We usually have two or three cases of this disease together in the hospital. At the present time there are two other young females suffering from the same complaint. There is pain and tenderness about the pit of the stomach; heat also internally about the stomach and throat, increased from the indigestion of any food; tongue white and red at the tip. These are the symptoms generally present in chronic gastritis. Besides this there is sometimes headache and pain in various parts of the body; bowels usually costive, and the menstrual secretion frequently checked. The treatment is very simple, and mostly successful: that is, starve them, by putting them upon slops, and reduce the system by blood-letting.

I bled this girl to a pint, ordered twenty leeches to be applied to the abdomen every other day, and put her upon a low diet. We frequently find spasms accompanying this disease; when this is the case, the patients will get, if they can, some kind of stimulant to relieve them, which will increase the chronic affection and lessen the spasmodic pain. I frequently find my cases, in private practice, labouring under this disease, taking wine, or some other stimulating drink, and cram down their throats all kind of stimulating food. Of course I can do them no good until they leave off taking such things as these. If their bowels are confined, the best remedy is rhubarb, or castor oil. If the inflammation is severe, I give them small doses of colamel; but if the stomach is in a very irritated condition, I trust to the local bleeding, without the aid of mercury: under this treatment, the cases that are at present in the hospital are getting quite well. If you find pain in the stomach from pressure, then there is inflammation; but if there is pain relieved by pressure, it generally arises from spasm. When a patient suffers from violent spasms, the part remains tender for two or three days, which goes off without remedies; but in inflammation, the pain yields to treatment. There also exists heat about the throat, and the patient cannot take any warm fluids. These then are all the cases in the women's ward.

One of the men went out with diseased heart; he said he should like to go home, to die by his wife. He was the last patient on the right-hand side, in William's Ward. He had a swelling situated rather to the right of the sternum, between the two heads of the sterno-cleido mastoideus muscle. It had pushed the right carotid from its situation, both of which were much dilated. Upon placing the finger upon the top of the sternum, the arch of the aorta might easily be felt, which was also enlarged. There was a very dull sound heard over the region of the heart; this was owing to its being much dilated; when the heart is enlarged, the dullness of the sound will be increased in proportion to its size; when there is a strong impulse, the heart is also hypertrophied. Upon using the stethoscope, just at the moment of the contraction of the left ventricle, you could hear what is called the bellows sound. It takes place as the blood is passing from the left ventricle into the aorta; the blood meets with some obstruction in its passage through the valves, which can easily be perceived; but if you reduce the circulation, the bellows sound will scarcely be heard. There was also another sound heard immediately upon the contraction of the auricle; I compare it to the whistling of the wind. I have never heard the sound before, nor have I seen it spoken of in any work. The bellows sound is produced in general from the valves of the aorta being diseased; the blood becomes partly obstructed in its passage through them; and the last sound, which I compare to whistling of the wind, is in consequence of the



valves allowing the blood to pass back again into the heart. In this man the blood was partly obstructed in passing from the ventricle into the aorta; then the valves, being slightly contracted, allowed a portion to regurgitate into the ventricle. (Here the learned professor made some observations on the opinion of Lennec.) The man was kept upon low diet, and bled occasionally, as the symptoms required it, from which he found himself much benefited. By some means or other he found out that he was going to die; therefore, preferring to die at home, he left the hospital to go to his wife.

I have now to speak of two other cases, which were discharged last week. One of them was a case of dysentery, the other rheumatism. The former was very slight, which speedily got well under the use of the sulphate of copper. It appeared that this man had been laid up in the East Indies with the yellow fever, and also with dysentery. On coming home he had a return of dysentery, arising from taking cold. After a person has once had this disease, he is very liable to a return of it. When he was admitted into the hospital, he had a frequent desire to go to stool, accompanied by tenesmus, and a quantity of matter was discharged with the alvine evacuations. He had no pain from pressure about his abdomen; I gave him one grain of the sulphate of copper every six hours. He was admitted Oct. 4, and went out quite well October 18th. The other was a case of rheumatism. Whether he was shanning or not I cannot say; he left the hospital a week after his admission quite well. When he came in, he said he had pain in his back and loins, also in his lower extremities, which were relieved by heat, and unattended by any other disease. This being a proper case for acupuncture, I had the needles stuck into his back for two hours every day. Whether he did not like the needles, or they cured him, I do not know, but he went out apparently quite well.

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ON THE

NATURE AND TREATMENT OF THE  
DISEASE

PRODUCED BY THE BITE OF A

VENOMOUS SERPENT.

By JOHN GORRIE, M.D.

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THERE is an ingenious intermixture of truth and fable in the history of the serpent, which has made it, throughout all ages, one of the most remarkable objects of nature. Placed in the sacred writings before all the beasts of the field, the emblem of wisdom, and the subject of adoration among some of the most cultivated nations of antiquity, it was long considered as endued with properties which could produce

the most wonderful effects, and calculated to excite the greatest astonishment. And, although it has ceased to be an object of religious worship, or even of admiration in the civilized world, such is the proneness of our nature to indulge in the exaggerations of the fancy, that it is still, from its association with many remains of ancient credulity, the source of more terror than any other enemy of man. Apart from the malignant effects the bite of the poisonous species induces, there is a horror arising from the origin of a disease in a wound inflicted by an animal, whose form and habits an early prejudice make us consider extremely disgusting. Producing such effects on the body and mind of man, it is hardly to be considered surprising, that, like the *bohon upas* of Eastern fable, it should be clothed in terrors far exceeding the reality, or that its assaults should be considered more injurious to animal life than any thing else within the range of creation.

It is certainly to be regretted, that a subject, capable of exerting a material influence over the happiness of mankind, should be obscured by the relations of the credulous, or the vain opinions of the ignorant and superstitious. The countries, in which the serpent exists, are replete with narrations, most of which are but slightly founded on fact, of its dreadful powers over human life. These idle fictions have also disfigured the pages of natural history, and the records of medicine, and have led to mischief, by exciting in the unfortunate sufferer from its attack an unnecessary solicitude, and even preventing the employment, by his attendants, of those judicious remedies which an unalarmed reason would suggest. So predominant is the dread of this reptile, that I have known, in the wilds of America, sinister reports of its unusual prevalence on certain tracts of land, to overcome the cupidity of shrewd people, and prevent the acceptance of advantageous offers for their sale. To divest the subject of the marvellous characteristics, with which an imperfect examination has clouded it, to present, in a prominent point of view, the probable pathology of the disease, and to deduce from it those principles on which its treatment should be based, will constitute the chief objects of this communication. The conclusions to which I may be led, I shall submit with great deference, as the result of the best information I can procure, some personal experience (derived from a long residence in the "back woods" of America), and all the reflection I can bring to the examination of the subject.

An animal that has furnished so fertile a theme of exaggeration, and capable of such really alarming effects, must have been always an object of great curiosity; and, indeed, any thing relating to it has ever excited an intense interest. Naturalists have displayed much ingenuity in the endeavour to distinguish, by the outward appearance, whether a snake be venomous or not; and certain arrangements of scales, the size of head, length of tail, and

colour of skin, have formed the basis of a division into the two classes. But a distinction, founded upon these properties, must be fallacious, because they are either not peculiar to any variety, or change with the different periods of the snake's age. However desirable it might be, in a scientific point of view, to be able to ascertain, from the external appearance, this difference, it is not, as far as therapeutics are concerned, a matter of consequence, because the effects of a bite, where venomous, are manifested so speedily, that all grounds of doubt are obviated before the snake can be examined. The only difference between the two kinds, that we know with certainty, is that the poisonous, by means of two hollow glands, situated at the exterior part of the base of the upper jaw, secrete a venom, which is transmitted through two (sometimes four or six) moveable hollow fangs, whose bases originate in the glands, into the wound, which the latter make in the act of biting.

"The effects of poisons of different snakes appear from the symptoms much alike, and the order of progression is usually the same, though the rapidity, as well as the commencement, is varied." In some instances, the first sensation produced by a bite is not different from the prick of a thorn, or any other pointed substance; while, in others, and in all when the action of the virus is taking effect, it is a burning pungent sensation, not unlike the sting of a hornet. This is soon followed by severe pains, generally described as lancinating, extending towards the origin of the nerves bitten, and a rapid swelling of the wounded part. Coetaneously with this state of the wound, the patient feels a pain in the region of the stomach with nausea, a dull pain with sense of heaviness in the head, dejection of spirits, with great faintness. The pulse is usually quickened, feeble, and interrupted, but in some instances is not accelerated, and the breathing is short and laboured.

In a severe case of the disease, or in a more advanced period from the bite, the preceding symptoms will be found increased. The part bitten will have assumed a shining, livid, or black appearance, and the skin around it, and sometimes of the whole body, takes a yellow hue, and, if in a limb, the swelling may have extended through it, and into the body. The face, tongue, and salivary glands become swelled, the secretion of saliva is checked, and deglutition is difficult. Pain at the præcordia is greatly increased, respiration is much embarrassed, and there is a vomiting of ponacious bile. Sanious matter is discharged from the wound, cold sweats and convulsions come on, and the patient may sink in an hour or two, but the fatal period is commonly at the end of two or three days.

This is the ordinary course and appearance of the symptoms, but their character is sometimes materially different. Thus it has happened, that there was no swelling or much pain about the part bitten, while a severe local irritation,

with swelling, has manifested itself in some other part of the system\*. In other instances, the effects discover themselves in a sudden and general prostration of the vital and animal powers, exhibited in a suspension or loss of the sensorial and motorial faculties, a weak thready pulse, cold clammy sweats, hiccup, and death.

Occurring in these forms, no trace of pyrexial excitement of the circulation can be discerned; and, indeed, in some cases, no other effect on the vascular system can be found than the effusion of fluid, from the excitement of the exhalents, which the pain and irritation produces, while, in other instances, a quick, full, and even hard pulse, accompanied with fever, have decidedly prevailed.

In the progress of the disease towards recovery, there is generally a sloughing of the bitten place, leaving an ulcer of greater or less size. And there remains very commonly, throughout life, a diminution of sensation in the bitten part, which is considerably increased under great changes of temperature.

In the speculations on the manner in which the venom of the serpent operates, to produce its terrible effects on the animal system, a great number of crude conjectures have been offered, all of which have given way to the two hypotheses of absorption, and its action on the nervous system. The difficulties attending a division between these two veins may be inferred from the facts, that Mead, in his first publication on this subject, thought it acted upon the blood, and in subsequent editions referred its operation to the nerves, while Fontana changed opinion the opposite way †.

The importance, to the enlightened physician, of a correct knowledge of the proximate cause of disease is so great, that upon it only can he direct his endeavours with a reasonable certainty of removing the lesions of the parts diseased. It must, then, be regarded as unfortunate, that each of the above views is supported by facts and reasoning that make both seem equally, or nearly equally, tenable. The recent discoveries in the anatomy and physiology of the vascular and nervous systems have advanced with so equal a pace, that while, in reference to the present subject, they enable us to explain either hypotheses more satisfactorily than formerly, they leave us in as great a dilemma as embarrassed our predecessors.

From the time of Mead, till very recently, the opinion that the disease was one of nervous irritation, received the general suffrage. The facility with which this view of its nature explained a great difficulty of the other hypothesis, namely—the speed with which the disease, after the accident, became apparent—was about to give it universal adoption, when

\* American Medical Recorder, No. 24, p. 620.

† Parr's Medical Dictionary, article, *Serpent*.

Magendie, by the revival of the ancient doctrine of venous absorption, gave it a shock from which it has never recovered. The celebrated experiment of the latter, in which a dog was killed by the insertion of poison into its paw, after its communication with the body was entirely cut off, except by quills introduced into the divided femoral artery and vein, has been regarded as ample proof that the virus of the serpent must act through the circulation. Inferences so important and so contrary to received opinions as were deduced from this experiment could not be silently acquiesced in, but gave rise to inquiries which have resulted in the proof, that the assumption of the function of absorption for the veins was gratuitous; for as it was found that their origins were continuous with the termination of the arteries, they could possess the faculty by transudation only. The discovery which M. Dutrochet has named *endasmose* and *exasmose*, shows, that a function analogous to transudation is generally prevalent in the animal system; yet it is altogether too limited to supply the place of general absorption, and too tardy to account for the rapid effects produced by the bite of a serpent.

But though the promptitude with which the poison of serpents manifests itself on the system fails to be explained by any action the veins possess, still, a speedy appearance of it in the circulation may be accounted for by the recent discovery, that the lymphatics send branches, which terminate directly in the veins of different parts of the body. In this way the fluid may be absorbed by the lymphatics, and be transmitted to the circulation almost as quickly as if taken up by the veins themselves.

The advocates of the sanguineous hypothesis reason, further, upon the analogy supposed to subsist between the effects produced by the bite of a snake, and those found to proceed from the injection of an extraneous fluid into a vein. Diverse as these effects are represented by different experimenters, it may be inferred from the general result, that foreign matters introduced into the circulation exert a deleterious agency on the system. It must be admitted, however, that substances in much greater quantities, and much less assimilated to the blood, in sensible properties at least, than the virus of a serpent, have been injected without producing a single serious consequence; while affections, similar to that produced by the bite of a snake, have existed where there could not possibly have been an absorption of foreign matters. It is stated, that "foreign substances injected into the blood, however diversified their character, produce, almost uniformly, the effects of evacuating the stomach and bowels\*;" while, in a number of cases of snake bite, I have not seen an instance of preternatural looseness of the bowels.

But, in far the greater number of cases, the disease affords evidence of its exclusive dependence on nervous irritation. Reasoning *à posteriori* on the rapidity with which the effects of a serpent's bite are always produced, the minute quantity of poison inserted into a wound, and this frequently in parts in which the circulating mass can be reached only by a very circuitous route, we are constrained to adopt the nervous hypothesis. This view of its mode of operation is supported by the character of the symptoms. Throughout the disease, the symptom that most forcibly presses itself on our attention is, a peculiar depression of the mental and voluntary powers, indicating that the general nervous system is deeply affected. The dejection of spirits, and great anxiety in the early, with the loss of volition and motion of the advanced stages of a fatal attack, manifest cerebral, and probably spinal, disorder. The affection of the stomach, its nausea and vomiting, with the stricture of the thorax, and laboured breathing, indicating congestion of the lungs, equally prove that the ganglionic system participates in the general derangement. Besides, the disease is confined, for a short time after its commencement, to the nervous system, and, in mild cases, has run its career without bringing the circulation into participation, an unity of action peculiar to the nervous system; or, at any rate, never exhibited in a primarily diseased action of the heart and arteries.

Considering the operation of the virus on the nervous system as the position that is the least disputable, it will still be difficult to explain the manner in which all its effects are produced; if, indeed, we can expect to approach a satisfactory solution. The local affection may be readily accounted for by the primary action of the poison on the nerves of the part bitten, producing irritation and pain, and, according to the maxim "*ubi irritatio, &c.*" congestion, swelling, or inflammation. As easily may we explain the manner in which the system becomes affected. Commencing at a point, the irritation is extended around it by contiguity, till the general source of nervous influence becomes affected, and, as a necessary consequence, a derangement of the whole system\*. That peculiarity of the disease by which an organ, situated remotely from the primary source of irritation, becomes more severely affected than the bitten part, is a conclusive proof of the nervous nature of the affection. It is manifest to all acquainted with the structure and functions of the body, that it must be through the nervous system that any organ can be suddenly influenced by a distant part†. But why one remote organ should be more severely affected than others is less clearly understood, if it be not absolutely mysterious. That property, however, of the

\* Chapman's Therapeutics, vol. i.

\* Chapman's Therapeutics, vol. i.  
† Philip on Indigestion.

nervous system called *sympathy*, determined by some circumstance, and particularly by the circumstance of "a nerve or set of nerves being more liable to disease than usual," or the termination of the nervous chain, in which the morbid action commenced, in the organ affected, affords us some means of developing its obscurity. Thus we find the pain of the shoulder accompanying affections of the liver; the head-ache arising from a deranged stomach; and the pain in the testicle from the passing of a calculus down the ureter; all which can be traced to derangement of common nerves, and which in their commencement are so clearly sympathetic, become, after some time, real diseases, having all the symptoms of primary affections\*. This comprehensive principle, though, from the complicated structure of the nervous system, it may not enable us to *demonstrate* "why one organ, or termination of a line of nervous communication, suffers, while others remain unaffected," affords us, in the present state of our knowledge, the most satisfactory clue to the nature of this singular and terrible disorder †.

In assigning to the nervous system the ordinary agency by which the virus of the serpent affects the system, it is not my intention to deny, altogether, that it may act through the circulation. To contend that it uniformly and universally acts upon the nervous principle alone, would be not less contradictory to reason and facts, than the exclusive advocacy of the other hypothesis. Medical logic cannot be limited by the axioms of the exact sciences; and that one, "to assign no more causes than are sufficient to explain the phenomena," is peculiarly inapplicable to our science. In the disease before us we are warranted in the belief that there are two causes—the one acting through the sentient extremities of the nerves, the other through the absorbents—each sufficient to produce all the deleterious effects of the serpent's virus. Nor is this double mode of action a peculiarity of this virus. Mr. Brodie has shown that vegetable poisons affect life both by nervous sympathy and the medium of the circulation ‡. It is only upon the view that the disease can arise from the instillation of the serpent's poison into the mass of blood, that we are able to account satisfactorily for the almost instantaneous death of a young woman, who was bitten by a rattlesnake over the plexus of veins on the instep, and into one of which a fang was clearly traced.

Admitting, then, that the virus of the serpent may act through the circulation, the question recurs, how does it, through this means, produce its terrible effects? Mr. Boag, according to Dr. Thomas, supposes that it acts

by subtracting the oxygen which the blood, in its passage through the lungs, receives from the atmosphere, and upon which its vitality depends\*. Mead thought it coagulated the blood. Neither of these positions is tenable. Mr. Brodie's experiments, in relation to the operation of poisons, afford us the most satisfactory evidence that the subject, at present, admits; and show, with little room for doubt, that its influence must depend upon its transmission through the circulation to the common sensorium.

The uniform fatality to the smaller quadrupeds which attends this terrible disease, and its occasional mortality to man, have created credulous fears, with regard to its effects, very unfavourable to its successful termination; and, indeed, so alarming is the state into which the patient is often and rapidly thrown, so unmanageable is the character of the symptoms, particularly in a delicate nervous habit, that they afford a just occasion for a guarded opinion as to the result. But in a disease characterised by so great mental and physical depression, nothing can be of greater importance to the patient than a freedom from anxious apprehension; and all possible means ought studiously to be taken, where his situation will warrant it, to inspire him with confidence in his security. This we can commonly attempt without danger of giving an erroneous judgment; for, happily, the bite of the most malignant serpent has seldom a fatal effect on so large an animal as man, even when left to the ordinary domestic remedies, and under a judicious treatment, the patient very frequently escapes from the most dangerous concurrence of symptoms. So general is this result, that of some dozens of snake-bites I have seen or heard, several of which were inflicted by the terrible banded rattlesnake (the *crotalus horrida*), I have known but two to terminate fatally. The season affords some ground for a prognosis, for it is an old remark, and elegantly alluded to by Virgil—

"Postquam exhaustæ palus terræque ardore  
dehiscunt,  
Exilit in siccum, et flammania lumina  
torquens  
Sæviti agris, asperque siti, atque exterritus  
æstu,"

that the serpent's virulence increases with the advance of the summer. But the surest basis for a correct opinion is founded on the symptoms. Where the bite is followed by swelling, and is not near to an organ of vital importance, the danger is not imminent, and a favourable issue should be expected. On the contrary, if there should be no local swelling of any kind, with great depression of the vital powers, independent of mental alarm, we must be prepared for a fatal termination.

The influence of high nervous irritation over

\* Good's Study of Medicine, vol. iii.

† Ibid. vol. iii.

‡ Paris's Pharmacologia, vol. i. p. 168. (American edition.)

\* Thomas's Practice, page 858. (American edition.)

the circulatory system is so extensive and minute, that the fluids become broken down in texture, and, involving the semi-solids, the whole proceeds, after death, rapidly to putrefaction. This is the chief reason why, in fatal cases of this disease, post-mortem examinations have been rarely practised, and consequently our information as to its effects on the different tissues is very limited. In the only dissection that I have witnessed (which was at an early period of my medical education), the viscera of the thorax and abdomen were extensively engorged; so much so, that the curiosity of the bystanders was greatly excited to know whence the mass of fluids came: there was also some effusion within the cranium.

The next consideration is the treatment of the disease. This may be divided into the local, or means of preventing the effects of the virus on the system; and constitutional, or plan of counteracting it after it has produced a general complaint. In meeting the first indication, the faith of mankind in noxious and effete antidotes, has been as extravagantly exercised as perhaps on any other subject. The course of the physician, however, is simple and obvious, and admits of no substantial improvement on the practice that has subsisted for nearly two thousand years; and should consist, as expressed by Celsus, "*quo plus vitii jam sanguinis extrahatur,*" in endeavouring, by the promptest and most efficacious means, to prevent the spread of the original irritation, by extracting the virus. Although no material advance has been made on the practice of the ancients, yet modern discoveries in science enable us to explain the operation of remedies much more satisfactorily. The interesting phenomena in relation to the function of absorption, discovered by Dr. Barry, and the investigations of Dr. Pennock\* of Philadelphia, who repeated some of the experiments of the former physiologist, and added some new ones to those he performed in Paris, have elucidated the agency of the vital principle in the production of this disease, and enabled them to apply the results of their observations with some success to therapeutics. They differ in their conclusions; the former referring the effects he saw to the pressure of the atmosphere on the veins; the latter, to the production of torpor in the nervous system; but agree in the value of the application. Could we, on either principle, apply a cupping-glass to the wound, immediately after the receipt of the injury, reason, as well as the result of their experiments, assure us it would, in every instance, suspend the operation of the virus. But as the orifice of the wound may be too small to allow the escape of the vitiated fluids, and the operation of the cupping-glass is but temporary, it will be advisable to attempt the extraction of the poison, as recommended by the former of the above-named gentlemen, by free scarifications, and re-applications of the cupping-

glass. If too long a time has intervened between the bite and the arrival of the surgeon to admit of the extraction of the poison before the mischief is done, still advantage may be derived from scarifying and cupping, in the neighbourhood of the bite, by the local relief it will afford to the torpid part.

There will be but few cases in which the cupping-glass can be applied so quickly as to produce its utmost remedial effects; and it will be, therefore, necessary to stop the communication between the bitten part and the rest of the system, by something more generally at hand. This may be done by a ligature, if the wounded part admits of its application. The salutary operation of this remedy consisting, in my view, like that of the cupping-glass, on the production of torpor of the nerves, it need not be tied so tightly as to check entirely the circulation; nor should it be continued so long as to induce mortification. Inattention to these considerations has been the source of much mischief; for it has come within my observation to see a limb amputated from their neglect. The point at which the continuance of the ligature becomes unnecessary, is when the effused fluids have formed a tense swelling, which, by its mechanical pressure, acts like a ligature in torpifying the nerves.

The employment of the cupping-glass, or ligature, may not be universally admissible; the bite may be on a part—as on the ear, nose, and various parts of the face and body, &c., to which neither can be applied. In this contingency, a good substitute is suction with the lips, as practised by the ancient *Psylli*, and the Indians of North America; though, from our not being able to make it act with a force sufficient to paralyse the nerves, it is not so effective as the instruments for which it is substituted.

In every case of the disease, and in its various stages, copious ablutions of warm water may be employed with advantage.

Of the immense variety of topical applications that have been imposed upon the credulity of mankind, as specifics in the cure of this disease, the above are all from which a rational view of its nature would lead us to expect a check of its extension. In the advanced stage of the complaint, when the wound has assumed the inflammatory character that it might have from other causes, many of the herbs that have been recommended, and are so popularly considered, as specifics, may be of service in the forms of poultices and fomentations; but he who, in the outset, uses them with the expectation of a specific operation, will probably be cruelly disappointed.

If, however, the period for the local plan of treatment should have passed, or, if it should prove ineffective, and the poison should have manifested itself on the system, it may be safely said there is no specific means of checking its progress, and, therefore, the symptoms must be combated on general principles, for which

\* American Medical Journal.

no precise rule can be laid down. But in a disease which, in a majority of cases, is so purely nervous, it is apparent, that while the effects are peculiarly those of the bite, the stimulant must be the proper basis of treatment. And from the extent of this nervous irritation, as characterised by the depressed state of the vital functions, "the grand object must be to stimulate the system so as to support it in the severe conflict to which it is exposed." The insensibility to the influence of stimulants is, in this disease, so great, that they must be given in doses which, in few other complaints, ought to be hazarded, thereby giving it a striking analogy to tetanus and certain other complaints of high nervous irritation. At a subsequent period of the complaint, when the circulation is brought into participation, or becomes the chief seat of disease, the treatment must be modified or altered, so as to remove the preternatural accumulations which may have taken place in various organs.

Among the remedies which have been given on the stimulant plan, or which at least act upon that principle, the suffrage, in all parts of the world, is by far the most considerable in favour of the volatile alkali. A free use of some stimulant being, perhaps, in every case, indispensable; and in the state of depression which is ordinarily induced, common means not being sufficient to support the system, ammonia, from its prompt and powerful nature, is the best adapted of the class. The supposition which has been frequently advanced, that it can exert, through the circulation, a neutralizing power over the virus, I consider unworthy of a serious examination.

Upon the stimulating principle, alcohol has been given, and in quantities so large that its beneficial operation can only be explained by supposing that great sensorial exhaustion was present, and must have been continually taking place. Wine might be an effectual substitute in mild forms of the disease, but in the severer cases it would be too feeble a stimulant; and as the object must be "to keep the patient alive, and prevent a fatal torpidity in the brain, till the irritation is rendered negative, or the poison eliminated from the system, it must be done at any expense of stimulus or of subsequent debility." To this class of remedies, either camphor and the cordials, all of which have been depended upon in the treatment of the complaint, and with good report of their remedial powers, must be considered as belonging.

In a disease which may be so distinctly referred to, and which appears to try so severely the nervous system, it is not surprising that, in the treatment, anodynes should have been had recourse to; or that they should have obtained some popularity. Indeed, it is quite probable, that the benefit derived from ammonia, camphor, and even alcohol, may be attributed as much to their secondary quieting effects on the nervous irritation, as to their primary stimulant mode of action. To this

principle may be attributed the remedial powers, where they possess any, of the great majority of American specifics—as some of the so called snake roots, the *asclepias verticillata*, *alisma plantago*, *agavi Virginiana*, *uvularia perfoliata*, *pedicularis Canadensis*, &c.; and the Asiatic antidotes, the *ophronhiza mungos*, *nux vomica*, *belladonna*, &c.—most, if not all, of which are found to possess narcotic qualities of more or less energy.

It must be regarded as singular, that to counteract a poison whose nature is decidedly sedative, opium, another sedative poison, should be, of the class of anodynes, the one chiefly depended upon by physicians. It has sometimes succeeded alone in large doses; but there is more evidence for its decided salutary effect when conjoined with alcohol. Under the use of this compound, I have seen the strength become quickly invigorated, the distressing nausea subside, and the patient resume his cheerfulness; and so prompt and efficacious have been its operation that, in my opinion, it presents the most powerful means we are acquainted with, of subduing all the constitutional symptoms of this terrible disease.

Emetics have been recommended in this complaint, and, in the hands of Fontana, the tartrate of antimony, it is said, was used with success; but how far they are to be depended upon as general remedies, sufficient trial has not been made by others to determine. When the system is sufficiently roused from its torpor to allow an intermission of the use of stimulants, mild emetics will no doubt be useful in removing the effete matter collected in the stomach, and thus refitting it for the more prompt action of stimulants. It is probable, also, that they may exert a salutary effect in the latter stages of the disease, in breaking up the morbid concatenation by which it is continued, after the exciting cause has ceased to act. In this way we may account for a part of the beneficial effect derived from many of the popular remedies, the general prescription being to give them till vomiting be produced, which, from their character, they may, in many instances, excite by the stimulus of quantity, though, no doubt, some good must be attributed, in other instances, to their previous stimulant and sedative effects.

From the preceding survey, I deem it sufficiently apparent that the disease consists in a poison of a peculiar but sedative kind, capable of affecting the vital functions, by a general nervous connexion with an incipient point of irritation, or through the circulation. It appears, likewise, from the history of the symptoms, that these effects will continue increasing in violence till those functions are destroyed, unless the source of irritation is cut off, the nervous system is enabled to re-act upon its torpor, or the poison becomes assimilated to the nervous or other secretions of the system. In this essay, my chief endeavour has been to remove a mistaken confidence in specifics, by pointing out, that, besides the extraction of

the virus, there is no direct cure for the bite of a venomous serpent; and, hence, whatever other plan be employed, must be on the general principles of medicine. It is manifest that this disease is one of the most alarming to which the human frame can be subjected; but from which, it must be acknowledged, patients have recovered under a great variety of modes of treatment, however incongruous and contradictory; and, hence, it may reasonably be inferred, that an early subjection to a rational course of remedies may be considered as insuring recovery from almost every instance of this much dreaded malady.

No. 10, Howland-street.

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## ANATOMICAL DESCRIPTION

OF THE

ORGANS OF GENERATION

IN A

HOTTENTOT FEMALE.

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THE interest that has been excited in the profession by the nature and peculiarity of the parts, as represented by a model in wax, just imported from Germany, exhibiting the organs of generation in a Female Hottentot, has induced Mr. Schloss to print the subjoined description, translated from Dr. Adolph Wilhelm Ouo's "Neue Seltene Beobachtungen zur Anatomie, Physiologie, und Pathologie Gehörig," and which he has much pleasure in offering, *gratuitously*, to purchasers.

The labia majora are rather full, but not larger than in a European; superiorly there is no commissure. The labia are about three-quarters of an inch separate from each other, the interspace being filled up with a cutaneous prolongation; they pass downwards for about two inches, and then terminate, without forming any inferior commissure. There is no peculiar prominence of the nymphæ, but they extend considerably downwards, being so much longer than the labia majora as to be continued below the opening of the rectum, which they surround. The anterior margin of both nymphæ (but particularly the right one) is large, notched, and unequal; the portion near and posterior to the anus consists of individual membranous lobes, separated by deep incisures.

It is very remarkable, that the vaginal and rectal openings are not merely close to each other, but included in a common circumscribed space, as in many of the mammalia. The perineum lies deep and unexposed, is scarcely a quarter of an inch in thickness, not flat, but rounded, and covered with a true mucous membrane. This is a congenital peculiarity, and has not arisen from a laceration of the perineum, or from disease. The most curious anomaly, however, remains to be described: this is, an extraordinary fleshy appendage, which descends

before the vulva like a valve, and which really, in some respects, deserves the suitable name of a flesh apron. The fleshy apron is by no means a mere enlargement of the clitoris, as is seen in the structure of the genitals of hermaphrodites; but it is clearly a sort of valve, or curtain of integument, which, only inasmuch as the corpora cavernosa terminate in it, and may render it capable of some erection, can be regarded as partaking of the hermaphroditic character. This membranous valve arises from the inferior part of the mons veneris, and at the superior part of the interlabial space by a stalk half an inch in thickness and in breadth; the integument of it passes into the mons veneris without forming any fold, and gradually increases in breadth, so that its transverse measurement in the middle is about an inch and a half, becomes again small and rounded at its extremity, and hangs down to the anus, its whole length being four inches, and covering the entire vulva as a valve. The superior or dorsal surface of this flesh apron is convex, and divided into numerous tubercular prominences by small grooves, which decussate each other; the integument is thick, tough, and black, and similar to that of the mons veneris; the edge is notched, but the extremity even; the inferior surface is flat, or rather slightly concave, and clothed with a delicate bright membrane, assuming gradually from the margins the character of a mucous membrane. The thickness of this very peculiar lobe of flesh measures in the middle, from the superior to the inferior side, half an inch; the extremity, which is tongue-shaped, is thinner, as also are the edges, which are sharp and defined. The whole lobe is not unlike, in form, colour, and warty surface, to a black slug (*Limax ater*), except that this fleshy appendage is broader and thinner.

The origin of this organ is above the clitoris; there is no appearance of glans or prepuce, hence it cannot be called an enlarged clitoris. Considered generally, the lobe is flaccid and membranous, somewhat tougher at its neck; the corpora cavernosa, rather large, are traceable into the inferior part of the neck, in which, perhaps, they gradually cease, and were capable of producing a slight turgescence and erection. The inferior surface of the neck, or peduncle, passes laterally into the nymphæ, and medially into the rima vulvæ, which is perfectly well formed. There is an interesting deviation observable on this inferior surface: at the usual place of opening of the urethra a groove arises, which becomes deep, and bounded by defined margins, and is continued down the lobe on the sides and centre about two inches, when it is no longer to be distinguished. The urine is directed in this way along the inferior concave surface.

The entrance into the vagina is rather wide; the hymen is certainly no longer complete, but, on the right side, assumes a somewhat prominent semilunar form, thick, fleshy, and notched at the side, and perforated by four

rounded openings. On the left side, there are many large caruncule myrtiformes, one of which contains a round foramen, three lines in diameter. The plicæ in the short portion of the vagina are rather strong, the canal of the vagina itself is wide.

There is a small but peculiar anomaly observable in the left nymphæ; this is a canal in the superior part of it, passing obliquely from above downwards, and from without inwards, and is continued superiorly under the membrane for some lines, and is covered with a fine velvet-like membrane; in my opinion, referrible to the sebaceous gland system; at least, several of the large sebaceous glands in the vicinity open into this canal: this may be demonstrated by the introduction of a bristle.

It cannot be denied that this structure of the female organs of generation is very similar to that of the Hottentot flesh-apron of the ancients, which has been lately contradicted with so much incorrectness, and which presents a new interesting form, which beautifully corresponds with that already known. On an accurate consideration of the various differences of the external organs of generation in negroes, there is not only seen, in almost all, a certain fullness and fleshiness, (Torusity,) but also a peculiar formation occurring in many families and branches of the Æthiopic race, on which the name of flesh-apron, or Hottentot apron, has been bestowed. The differences are so various as to enable us, by considering them, to reconcile the opposing statements of travellers. If I do not err, the several structures are reducible to the three following principal forms:—

1st. The labia minora, or nymphæ, are unusually large and prominent; they are also notched, and they form, in their junction, a præpuce of more or less projection: this appears to be the most common formation. The observations of Sonnerat, Barrow, Somerville, and Cuvier, made on many female Hottentots, particularly on those of the Bushman tribe, agree in this respect.

2d. The labia majora are very much elongated, and form broad cutaneous lobes, which hang down some six or nine inches; others have smaller digitated processes, such as those delineated and described by Vaillant. They are also represented in sketches, made at the Cape, which I have had an opportunity of seeing through the kindness of Sir Joseph Banks. I have obtained a copy of them from Professor Blumenbach.

3d. An extraordinary fleshy process, which arises by a peduncle, or neck, from the inferior part of the mons veneris, between the superior terminations of the greater labia, and which hangs down as a valve, or small apron, before the otherwise normally formed vulva; this valve, however, is by no means merely an enlarged clitoris, but a peculiar structure confined to the natives of the south only. The last degree of this structure seems to me to be that described by Clark, which he observed in

many negroes of the Mandingo and Ibbonation, in the West Indies. The following is his description:—"The clitoris was two inches long, and might be compared in size to that of a well-formed thumb; when viewed at a little distance, the extremity of the organ appeared to be round, and of a red colour; on a nearer approach, however, it seemed to be more pointed than a penis, not flat inferiorly; no præpuce or opening was present; when touched, the organ became somewhat erect and much larger, and then measured three inches in length. When the individual required to evacuate the bladder, it was found necessary to raise up this body, as the opening of the urethra was entirely covered by it."

[The colossal representations of the human body by Professor Serierig, are now nearly completed, and ought to be in the possession of every surgeon.—Eds.]

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#### LOSS OF VISION CAUSED BY LEUCORRHŒA.

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*To the Editors of the London Medical and Surgical Journal.*

GENTLEMEN,

THROUGH your valuable periodical, I wish the following case to appear before the medical profession; as, in the first place, I conceive it to be new; secondly, that others may be relieved, as the subject of it has been; and also to prove the very severe shock the nervous system receives from a deranged state of the female reproductive system.

I am, Gentlemen,

Your obed. servant,

ROBERT WELLS, M.R.C.S.

*Stow Market, Suffolk,*

*Sept. 26th, 1832.*

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Elizabeth Firman, aged 20 years, applied to me on the 28th Jan. 1832, with total loss of vision, paralysis of the left eyelid, and the right partially so. After questioning her for some time as to the origin of her blindness, symptoms since, &c. &c., I was suddenly struck with the idea\*, from the leucophlegmatic appearance

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\* For which I am indebted to that distinguished lecturer, Dr. Addison, whose valuable lectures, both clinical and medical, I had the good fortune to attend.



of her countenance, together with want of the natural healthy contractility of fibre, that leucorrhœa was the principal or exciting cause. Upon minutely examining both herself and mother, I learned that at the age of 16 years, or thereabouts, she first menstruated and continued to do so regularly for upwards of 18 months, since which time she became very irregular, and has had an excessive discharge of white mucus, which greatly impaired her constitution.

About two years since, she had a severe ophthalmia, which, as I am informed by her medical attendant, was treated in the usual way and quickly got well. Shortly after that time, paralysis of the eyelids, as before mentioned, supervened, and the power of vision gradually became very obscure, until it was wholly lost in the left eye; and the right very quickly afterwards shared the same fate. When the eyelid was lifted up, and rays of light allowed to pass on the retina, neither dilatation nor contraction of the pupil, which had an oval appearance with uneven edges; but complained of great pain at the posterior part of the orbit; in fact, the iris and retina appeared to me also paralysed.

During the time the unfortunate girl was in this state, she obtained admission into the Bury Hospital, where she remained eleven weeks; and, as she tells me, was cupped, blistered, and took medicine, which caused her to spit for upwards of a month, all which produced no beneficial effect; but, on the contrary, was much worse when she came out than when she was admitted. She applied also to various medical men in the neighbourhood, but to no purpose; the left eye becoming totally insensible to the strongest light. Electricity had also been tried. During the last 12 or 18 months she had pain in the left side, behind and below the false ribs; also great pain in the lumbar region.

The treatment which I pursued was as follows; believing the whole to arise from leucorrhœa, and the

other ailments merely symptomatic of the same, to relieve congestion, which I felt certain existed,

**R** *Cucurbitula cruenta* ad  $\zeta$ xx. *nuchæ*.  
*Hydrarg. submur. gr. iv. horâ som. sum.*  
*et mane sequente pulv. jalap, ʒj.*

which acted briskly on the bowels.

Feb. 1. Skin being dry, and tongue furred, ordered

**R** *Pulv. potassa nit. gr. x. ter indies.*  
*Extr. hyos. extr. col. comp. ā. gr. v.*  
*Pil. hydr. gr. ij. ft. pil. ij. o.n. sumenda.*

To inject the vagina, with a moderate degree of force, by means of the common vagina syringe, with curved pipe, the

*Lotio alum. c. zinci, ter die,*

which, with occasional purgatives, she persevered in for upwards of a month, with but little alteration more than trifling irritability at the posterior part of the orbit, and pain at the back of the head, when

*Vena sectio ad ʒxviiij.*

was considered advisable, with a repetition of the first purgative, and desired strictly to attend to the injection, and take the night pills for another month, which she did, and with a very pleasing result, as, at that time, she could raise one eyelid, and was able, with one eye, to distinguish objects. Eleven weeks from the time I first saw her, she felt a sharp pain, explained to me as something suddenly parting at the back part of the head, and at that moment a slight glimmer of light was first experienced with the other eye. I then bled her to 12 ounces; since then the power of vision has been gradually returning.

It is now four months since she first used the injection, and is able to read, work, or do any thing she may require; her health has also greatly improved, and is at the present (Sept. 26th) as well as ever she was in her life.

The leucorrhœal discharge having ceased, she now menstruates regularly.

I must also say, that, upon the return of vision, she took ferri carbonas, ʒss. ter die, with the pills first

prescribed, every night, and continues using the lotion. It is my intention to request her persevering in the same for some months longer.

I am induced to allude the whole to morbid action of the uterus, as she so rapidly improved upon the discharge diminishing.

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**EFFICACY AND MODE OF PULVERIZING  
SECALE CORNUTUM.**

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*To the Editors of the London Medical and  
Surgical Journal.*

GENTLEMEN,

IN the course of my obstetric practice, I have often had occasion to administer the secale cornutum, and from its horny texture experienced the very great difficulty of bruising it sufficiently fine for use in a mortar. This led me to make trial of the common domestic coffee-mill, and it completely answered the purpose, with comparatively little or no trouble at all. I have continued to use it successfully ever since. It will enable those who employ it to have, at all times at command, the article fresh and genuine; qualities not always to be relied upon when procured in powder; and it may be supposed that the ordinary process of drying previous to the usual mode of pulverizing dissipates some of its virtues, and the long keeping of it in a state of powder may perhaps sometimes entirely destroy them; but by the mode recommended an extemporaneous powder may be obtained, quite fine enough for the preparation of decoction, or even for giving in the form of powder, when that mode is preferred; and it is my belief, that if those of my medical brethren who are now sceptical as to its highly useful qualities will but try the plan here recommended, they will certainly have their doubts removed.

I send this very trifling communication for the benefit of the readers of your valuable Journal, should you deem it worthy of a place therein.

Yours obediently, W. T.

London, October 25, 1832.

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WONDERFUL FEMALE PRECOCITY.

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IN addition to the instances of female precocity on record, the following seems worthy of particular notice. A communication was lately made to M. Geoffroy Saint Hillaire, by Dr. Lebau of New Orleans, to the following effect:—"Matilda H., born, of poor white parents, on the 31st Dec., 1827, having the breasts well formed, and *le mons veneris garnis de poils comme celui d'une fille de 13 à 14 ans*. At the age of three years the menses appeared, and have continued regularly every month up to the present time: they have been as abundant as those of grown-up women, and on each occasion have continued for four days. At present she is aged five years and six months; her height is 42½ inches, French measure; her features are regular, her complexion rosy, her hair chestnut, her eyes greyish blue. She is really pretty, well formed, and enjoying perfect health. Her breasts are now each the size of a large orange, and the dimensions of her pelvis such that I am of opinion she might become a mother at the age of eight or sooner." All this is certified by four physicians, whose signatures are verified by the Mayor of New Orleans and the French Consul.

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A SENSATION has been lately created at Paris, by an Italian pastrycook, who sells a particular kind of bread ("*pain Griccini*"), which has been considered of particularly easy digestion. A specimen of it has been submitted to the sage investigations of the Academy of Medicine, and a report, giving it the superiority over all other kinds, had been actually proposed; but, lest a patent should be claimed, the opinion was qualified down to simple approval of its good quality. We have no doubt of the exhibition of the *pain Griccini* soon in our city of luxuries.

THE

## London Medical &amp; Surgical Journal.

Saturday, November 3, 1832.

THE APOTHECARIES' COMPANY.—  
MORTALITY CAUSED BY EMPIRICISM.

THOUGH we highly approve of the strenuous and judicious exertions made by the Society of Apothecaries for the improvement of medical education, yet we cannot but condemn some of their regulations. We fully agree as to the necessity of enforcing attendance upon all the branches of Medical Science; but we must condemn the *ex post facto* law, which obliges a vast number of students, who have completed their apprenticeship and education, to submit to a school-boy examination in classics, which was not required when they entered the profession. This kind of legislation is condemned in all countries, and is not tolerated in the Imperial Parliament of the United Kingdom.

In saying this, our readers must not for a moment suppose that we object to classical knowledge; but we think it impolitic and unjust to reject students on account of their deficiency in a language which was not required when they commenced their studies, though they may be able to make up prescriptions, and be fully entitled to the licence of the Apothecaries' Company. We cannot help thinking that the Court of Examiners are acting unjustly in pursuing this course. They well know that a great majority of the older practitioners, men in extensive practice, could not pass the ordeal of

the Latin examination now instituted at the Hall, though they can prescribe and practise with judgment and success. It is cruel and tyrannical to blast the prospects of those entering on the theatre of life; to distress their relations and acquaintances, on account of deficiency in classical erudition, though their medical information is all that can be expected. This evil can be corrected by enforcing the regulation, or by-law, to which we allude, after a year or two; but to have it take effect suddenly is as oppressive as it is unjust. The candidate for examination at the Hall has quite enough to think of besides translating abridged and ill-written prescriptions; and if he be able to translate the ingredients, combine them, and give directions, it matters not to the patient or the public whether he is or is not a classical scholar.

In urging these arguments in favour of those who pursued their studies previously to the obnoxious by-law under consideration, we by no means dissent from the spirit of this regulation, provided it affected those who may henceforth become apprentices. We fully agree with the general opinion of the profession in this country, that a knowledge of Greek, Latin, French, German, and Italian, is indispensably necessary to medical practitioners, but let it be required in future.

Though we often find it necessary to censure the Apothecaries' Company for their bungling legislation, and their oppressive and unwarrantable

conduct towards individuals, we fairly admit, that they have done much more good in promoting the interests of science and of the public, than their antiquated and useless contemporaries in Pall Mall East and Lincoln's Inn Fields. But we should like them to commence law proceedings against chemists, druggists, and quacks, as well as against those general practitioners who are now pursuing their studies, and whose ultimate object is the acquisition of the diploma from the Society. We know several instances, at the present moment, of gentlemen whose families are seriously injured by the expensive law proceedings imposed by the Hall, while chemists and druggists, who receive no medical education, are allowed to prescribe, visit, and poison the sick with impunity. We ask any dispassionate man, can any thing be more unjust than the toleration of this system? The general practitioner who qualifies, or intends to qualify, spends the best part of his youth, and incurs great expense, has no protection whatever from the Apothecaries' Hall; for every illiterate plebeian may commence practice next door to the former, style himself chemist, surgeon, and accoucheur, impose on the public, and destroy the health or lives of his Majesty's lieges with perfect impunity.

Nevertheless, one of our luminous contemporaries lauds the Apothecaries' regulations to the stars, and by a peculiar obliquity of vision in his enlightened mind's eye, can perceive no defect in the wisdom, equity, and policy of the proceedings of the Hall.

Let it not be supposed that this branch of the profession is less wise or consistent than the others. The fact is, that in no part of the world, in which medicine is practised, are the laws relating to it so absurd, antiquated, and defective, as in this kingdom. The country is overrun with empirics. These vermin supplant the faculty; the different grades of the profession are infringing on each other; it is perfectly impossible to depend on the medicines prepared in one house in a hundred; the character of the faculty is depreciated; and the health and lives of any class of society are sacrificed every hour by the defective state of the laws relating to the practice of the profession.

In stating the impossibility of procuring genuine medicines in London, we are aware that surgeon apothecaries have all the drugs ordered by the London Pharmacopœia; but this code does not include the most powerful and valuable remedies, as quinine, morphine, strychnine, iodine, &c., nor the innumerable preparations employed by foreign practitioners, many of which are extremely valuable. Every scientific and learned practitioner will prescribe those remedies which experience has proved to be the best, and will be totally indifferent whether they are sanctioned by the pharmacopœia or not. But they can only be procured from the trading chemist or druggist, who is not a medical man, and whose only object is the accumulation of wealth, and not the interests of science or humanity.

The consequence is, that medicines

are adulterated and often rendered inert, or useless; the character of the prescriber is unjustly aspersed; the welfare of the sick is injured; diseases are aggravated—are allowed to distress the sufferers, very frequently to the great injury of their families—and even life itself is sacrificed. In proof of this statement we shall adduce a single fact, though we might a thousand.—It was lately stated at the Medical Society of London, that the hydriodate of potass was not genuine in any shop in the Metropolis, but one; and that, in most instances, two-thirds of it were common carbonate of potass. The same thing may be said of iodine; so that the only remedy known for the cure of every form of scrofula, and for numerous other diseases, cannot be procured genuine, and thousands of individuals are doomed to suffer from a painful and disgusting malady.

Again: we cannot order acetate, morphia, or any of its preparations, but must employ a substitute, a nostrum, whose composition is concealed. When we order any of the new remedies, they cannot be procured, and the usual reply is—"O! it is not in the London Pharmacopœia," ergo, a man is to have scrofula destroy him, because its remedy is not in the London code of drugs.

When we consider the injury done to the public, and to the profession, by the neglected and degraded state of pharmacy—by the adulteration of drugs—by quacks, chemists, druggists, pretended surgeons and accoucheurs—we are astonished that the

press does not take up the subject. When we daily observe the magnificent power of the press in exposing abuses, and mainly effecting their correction, we deeply regret that it can afford no space for the exposure of abuses in medical practice, which inflict such extensive injury upon every rank of society, and mainly contribute to swell the bills of mortality. The protection of the public health is the sovereign law in most countries, and it is so with us, in theory, but not in practice.

IN our next Number we confidently expect to submit the successful issue of our application to the Court of Common Pleas, to set aside the verdict against the avowed Editor of this Journal. The grounds upon which we apply will astonish the public as much as the extraordinary decision has already done. We trust that this cause will lead to many important results, not only to ourselves but to the public.

#### LIBEL ON MR. BRODIE.

IN the *Legal Examiner* of last week is a shallow, lame defence of that enlightened "physician," Mr. St. John Long, in which Mr. Brodie's professional character is most unjustly attacked and libelled. The writer accuses this gentleman of having formed a conspiracy to ruin the scientific Galileo, as Long is yeilded, and asserts that his evidence, at the inquest of the slaughtered Miss Cashin, was false. Mr. Brodie is too eminent an individual to notice this foolish piece of nonsense of our sagacious contemporary, or to condescend to reply to Mr. St. John Long, though a second Galileo. That distinguished paper, the *Sunday Times*, puffs off the affair, no doubt, from purely disinterested motives.

## CHOLERA NON-CONTAGIOUS.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

As every well-authenticated record, carrying back our knowledge of Asiatic cholera to a period considerably earlier than 1817, must, at the present time, be valuable, as showing, or tending to show, that it is not, in its original character, a contagious disease, I send you enclosed an extract from a letter containing, in my opinion, the most graphic description of the disease I have yet met with. The letter was written at Tranquebar, a town in the province of Tanjore, in 1782, by König, I believe, a physician, but much better known as a botanist; and addressed to Ritzius, a botanical friend in Germany, who published it in a note to the preface of the fourth fasciculus of his "Observationes Botanicae," a very scarce book, printed at Leipsic in 1786. König was at that time travelling in India, engaged in the study of the rich and curious flora of that country. To the accuracy of the description of the disease, as it appears in that part of India, I can bear ample testimony, as it prevails to a greater or less extent, I may say, annually; and I resided nearly three years within a few miles of Tranquebar. The cause of its frequency there admits, I think, of an easy explanation. In the province of Tanjore, owing to the facility of irrigation, rice is the principal produce. The whole of the low grounds, amounting to nearly four-fifths of the province, are, on this account, laid under water in the course of July and August, and continue so till January. In October the monsoon sets in, usually accompanied with heavy rains and a cold damp atmosphere. This continues, at intervals, till December, when the weather becomes dry, with a clear cold atmosphere, which continues, with the exception of occasional falls of rain, nearly the whole

of February. It is during the rainy season, when the atmosphere, naturally raw and cold, is rendered still more so by the vast quantity of water spread over the country for irrigation, and which is carried even to the walls of the houses of the villages, that the disease makes its appearance. During some seasons it is scarcely observed, while in others it prevails to a most appalling extent. Such appears to have been the case in 1782. In 1829 it was nearly as bad among the native population, and carried off immense numbers. Tranquebar, from standing on the surface of a rich and highly cultivated soil, the rice fields of which extend to within a few yards of the walls of the town, and containing besides a dense population, is as liable to these visitations as any other town in the province, and suffers as severely in unhealthy seasons. The disease, then, is endemial in Tanjore, and has been known there from time immemorial; yet I have no doubt that, if we could only send a few determined contagionists there, to investigate its nature and mode of propagation, they would prove, that it spread by contagion only. Instances, in abundance, of that indubitable proof of contagion, "the disease running through families," would soon be found; many such I have both seen and heard of, but consider of no value either one way or another; since, for one family that the disease so runs through, there are, perhaps, fifty that it does not; and what may be considered still more in point is, the unexplained fact in the spread of all the so called contagious diseases, that they often, nay, generally, stop suddenly, at the *acmé* both of their extent and intensity.

If you think these observations and the accompanying Latin description from the pen of a sufferer worthy of a corner in your Journal, you will much oblige by their insertion,

Your obedient servant,

TANJORENSIS.

London,  
22d Oct. 1832.

## EXTRACT.

Scribit (K nig) in ultimis litteris d. 16 October, 1782, Tranquiliaria datis,—“Nuper iterum morti proximus fui, morbo enim diro quem dysenteria apoplectica appellare fas est, tenebar, quo me mortuum jam in urbe rumor spargebat. Sanitatem redidit clementissimus Deus. Integer tamen mensis ante perfectam restitutionem transit morbi cursus hic est. Diarrhœa corripitur æger, cum elastica quasi excrementorum ejectione, dum frequuntur ejusmodi dejectiones, quæ nihil nisi humorem lymphaticum clarum continent. Manus mox frigent cum pedibus. Manum musculi contrahuntur et hæ æque cum facies flavidum glutinosum mucum transudant. Pulmonis angustantur, vox rauca vix adstantibus percipienda. Alii timore percutiuntur, alii indolentes videntur, pulsus in omnibus extremitatibus deficit et tantum ad arteriam carotidem observatur, quamvis irregularis. Nonnulli jam voment unques lividi fiunt, et diri spasmi brachia, et suras corripunt, cum clamore ægroti. Hæc mors sequitur sine insigno convulsivo motu cursum hunc sequitur morbus, qui sæpe intra semihoram terminatur, nonnunquam sex ad octo horarum spatio absolvitur. Qui remediis sublevantur idoneis nycthemis spatium illum protrahere possunt. Pauci sibi relecti convalescunt. Hunc ego morbum periculosissimum vici et sospes prolixè descripsit.

(True Copy.) T.

## Hospital Reports.

ST. GEORGE'S HOSPITAL.

October 18.

THIS day Mr. Brodie extirpated a fatty tumour from the shoulder of a woman; and, after the operation, which was performed with that dexterity for which the operator is so

famed, Mr. Brodie addressed the pupils.

“Gentlemen, I shall take this opportunity to make a few remarks to you upon the nature of fatty tumours, one of which you have just now seen me operate on. There are three kinds of fatty tumours: one, such as we have had here to-day, consists of a collection of fatty lobules, rather more vascular, and of a firmer consistence, than common fat, connected together by cellular substance, and inclosed in a membranous cyst, which you see I can strip off into layers (*exhibiting it to the class*). Such tumours you will meet with at any period of life; but I believe, however, that during the middle years of life, they are met with more commonly; and they sometimes reach to a very large size, to the weight of 25 or 30 pounds; they are, however, easily cured, and may be very simply extirpated by the knife. You saw to-day how I operated; I cut through the skin the whole length of the tumour, right into its substance, and then separated it, membranous cyst and all, from the surrounding cellular substance. This you saw I did very easily with my fingers; I, in fact, turned it out, and it was only at its neck, where the blood-vessels supplying it ran into it, that you saw I was obliged to use the knife. All these kinds of fatty tumours are removed in the same way. They never return again when once cut out, at least I never knew of a case but one, and that occurred to me in private practice, when some unforeseen circumstance prevented my extirpating the whole. I left a portion of it behind, and it grew again to a tumour. This is the only instance of the kind that I know of. The next species of fatty tumour is that where the tumour has no regularly defined edge or margin, and when you feel it under the skin, you cannot say—here is one side of it, and here is another. In the one that you have just seen, there was a clear circumscribed boundary line separating it from the adjacent cellular membrane. But in the one that

I am now speaking to you of, the fat of the tumour and the fat of the cellular membrane are so intermixed together, that you cannot separate the one from the other. It must therefore be quite clear that an operation in these cases is totally out of the question. What are you to do, then? Why, you may do a great deal in these cases by giving medicine internally; and the best medicine you can give in these cases is the liquor potassæ in small-beer or compound infusion of gentian. There is another species of fatty tumour:—when the tumour is enclosed in a reflected membranous cyst, in the same way that the head is enclosed in the pericardium. Now, these tumours you may also rid your patient of by a surgical operation; but, as in the former case, I told you to cut through the sac into the centre of the tumour, and dissect it out, so here you must be very careful to dissect out the tumour with the sac entire."

Oct. 19. A patient was admitted the day before yesterday (the 17th) with piles, and Mr. Brodie tied them to-day. They were very large, and Mr. Brodie took the opportunity to explain to the pupils who were present the theory of hemorrhoids, their cause, diagnosis, &c., and to illustrate to them practically, the mode of curing them by ligature. The patient having brought down the hemorrhoids by sitting over the steam of warm water, was ordered to lean forward on a table. Mr. Brodie, then, having a curved needle armed with a long and strong double ligature, passed it through the middle of the hemorrhoid, and thus tied a single ligature on each side of it; the ligatures, when tightened, forming nearly a figure of 8; they were drawn very tight, for this is essential, and then that portion of the pile on the outside of the tightened ligature was cut off with the scissors. In this way three internal piles were tied and cut, and one external one was simply cut without being tied. After the man was sent to bed, Mr. Brodie addressed the pupils.

"Piles, you know, gentlemen, are dilated veins—so I was taught when I was studying the profession—so I saw them by means of preparations in the College of Surgeons—and so I find now by my every-day experience. Well, then, piles are dilated veins; but how do these veins become dilated? Why, they become dilated by the bowels falling into a costive state, and the hard fæces press upon the veins which return the blood into the mesenteric veins, and thus the veins of the rectum become dilated, or enlarged, and form piles. You saw, as I showed you, that in those piles that I cut off that way, one of them had a large dilated vein in the centre. Well, then, in the early stage, piles are only dilated veins; but you saw that in the case that I operated on to-day, that there was something more than simply the enlarged vein—that there was a great deal of thickening around it. Well, what is this thickening? why, it is coagulated lymph, and that is what you have in all advanced and bad cases of hemorrhoids; the vein is first enlarged and dilated, from its containing a larger quantity of blood than natural; this brings on inflammation, and coagulated lymph is thrown out as a consequence of that inflammation. You have precisely the same train of symptoms in varicose veins of the leg. Well, how are you to cure piles? Why, in the early stage, injections of cold water up the rectum; taking the Ward's paste, the *confectio piperis nigri* of the *Pharmacopœia*, with a dose of the confection of senna, with a little sulphur occasionally, will generally suffice. But, in the more advanced stage, you must tie them, as you have seen me do. But this is not all; in performing this operation, you must remember an important caution, you are to tie internal piles, but not external. Internal piles are those situated up the gut, and above the sphincter ani muscle. External piles are those situated more externally, and below the sphincter ani. Internal piles, then, you should tie, and then



cut them off; and why? because, if you cut them off without tying them, and they are returned into the gut, bleeding may come on, and this is a very awkward thing, for the bleeding vessel is out of sight, you cannot see it, and you cannot apply pressure to stop the bleeding; therefore, remember that internal piles should always be tied. External piles, however, you may cut off with the scissors without tying them, as you saw me do in this case. Here, if bleeding occurs, you can always see from whence it comes, and can therefore stop it. There is not an easier or simpler operation in surgery than tying piles, and it is seldom or ever followed by any bad results. I know there are many surgeons who say, that the tying of piles is very dangerous, but I am sure, that those who say so must be mistaken, and must have tied internal piles instead of external ones, and, in that case, I dare to say they are correct when they speak of the bad consequences resulting from it.

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CHOLERA HOSPITAL, ST. HILIER'S.

*Cholera—Consecutive Fever—Venesection—Mal-a-propos—Delirium Tremens—Death.*

THOMAS PREVOT, *ætat.* 36, a shoemaker, of imtemperate habits, was admitted into the hospital on the 17th September, at one P.M. He was suffering from severe and general spasms, and had the watery evacuations from the stomach and bowels; pulse good; tongue foul; extremities not cold, nor the eyes sunk.

Siapisms to the spine, epigastrium, and legs; sand-bags to the hands; ether and ammonia mixture.

Two P.M. The spasms are not so severe; has vomited and purged once or twice since last report, passing the characteristic fluid.

Three P.M. The spasms are considerably diminished; body warm; tongue warm and foul; complains of pain in the abdomen.

*R Hyd. submur. ʒj. statim sumend.*

Eight P.M. Says he is free from pain, or any uneasy sensation; the spasms have not recurred; pulse moderate; body warm; has had two or three watery evacuations, and vomits all he drinks; has made water this evening.

*R Hyd. submur. ʒj statim sumend.*

Repeat the mixture.

Ten P.M. Is very thirsty; pulse maintains its character; face covered with a cold perspiration.—Continue.

Half-past Ten P.M. Continues very thirsty; has tremors of the hands.

*R Brandy, ʒij.; sp. ammon. aromat. ʒj.; aqua, lb. ij.*

to take some every half hour.

18. One A.M. The tremors are lessened, though still evident; skin warm; pulse full and frequent, 75.—Continue.

Seven A.M. Is bedewed with a warm perspiration; body generally warm; pulse full and strong; has not been purged since the last report.

Ten A.M. Is still very thirsty; pulse as at last report; is free from pain; toast and water as drink, as often as he desires it. Omit the brandy and ammonia mixture.

Four P.M. Pulse full and strong; tongue foul; no head-ache; bowels not open.

*Hyd. submur. gr. v. fiat pulv. statim sumendus, et in duabus horis repetendus, si opus sit.*

Seven P.M. Has had a dark stool. Repeat the powder.

Nine P.M. Has again passed a dark-green stool.

*Haust. niger statim sumendus.*

19. Nine A.M. Has slept well; bowels open; pulse full and strong; tongue still furred; has a good appetite.

*R Hyd. submur. gr. v. Pulveris zinziberis, gr. v. M. fiat pulvis statim sumendus,*

Eight P.M. Bowels open; stools more natural in appearance; tongue cleaner.

*Haustus niger mane.*

20. Is apparently going on well ; tongue cleaner ; no head-ache.

**R** *Hydragryri submuriatis*, gr. ij.  
*Pulveris aromatici*, gr. ij.  $\mathfrak{M}$  fiat pulvis bis in die sumendus.

Eight P.M. Says he has not any head-ache, but he appears rather wild and flighty ; eyes very bright, and apparently suffused ; pulse full and strong, 100 ; scalp hot ; temporal arteries beating powerfully ; bowels open several times to-day ; stools dark ; tongue furred.

*Applicentur hirudines duodecim temporibus.*

**R** *Hydragryri cum cretâ*, gr. v.  
*Pulveris aromatici*, gr. ij.  $\mathfrak{M}$  fiat pulvis ter in die sumendus.

21. Has been furiously delirious the whole night, and it is necessary to strap him to his bed ; he would not allow of the application of leeches, and was consequently bled from the arm, and 18 ounces taken ; scalp hot ; pulse not so strong, but still full ; tongue furred ; delirium strong ; wanders much.

[On the question being agitated respecting the propriety of further bleeding, the following opinion was expressed :—The man's previous habits being considered, and the bleeding of last night taken into the account, it was to be feared that, should a further abstraction of blood be practised, delirium tremens would set in, and, as his constitution was much debilitated, carry him off in a short time. Anodynes to allay irritation, and induce sleep, if possible, were considered as more especially indicated.]

*Abradatur capillitium.*  
**R** *Ætheris rectificati*,  $\mathfrak{z}$ ij.  
*Liquoris ammoniac acetatis*,  $\mathfrak{z}$ iv.  
*Aqua*, Oij.  $\mathfrak{M}$  fiat lotio evaporans, capiti frequenter applicanda.

**R** *Mistura camphoræ*,  $\mathfrak{z}$ vij.  
*Tinctura hyosciami*,  $\mathfrak{z}$ j.  $\mathfrak{M}$  fiat mistura, capiat cochlearia ampla duo sextis horis.

Five P.M. Is calmer ; pulse not so strong ; head cooler ; tongue furred.

*Continuetur applicatio lotionis.*  
*Repetatur dosi una misturæ quartis horis.*

The bowels not having been opened

since the morning, was ordered a black draught to take immediately.

Nine P.M. Bowels moved once by the draught ; is very restless, but not so much so as before ; is very loquacious ; eyes wild ; tongue rather cleaner ; pulse not so frequent, nor so full.

**R** *Extracti hyosciami*, gr x.  
*Camphoræ*, gr. ij.  
*Sp. vin. rect. q.s ut reducetur in pulverem fiat pulula duo nocte sum.*  
*Continuetur dosi una misturæ tertis horis.*

22. Is very turbulent and restless ; did not sleep at all during the night ; tongue still furred ; an appearance of sordes about the lips ; eyes still wild ; scalp not so hot ; stools dark-brown ; pulse frequent, not so full, about 90.

*Repetatur mistura cum tincturâ,*  
*Hyosciami*,  $\mathfrak{z}$ iss. *sumat dosi una tertis horis.*

Seven P.M. While the hospital surgeon was absent, a physician of the town called in, and being of opinion that active inflammation was going on, bled the man to 24 ounces. The consequence was a rapid sinking of the vital powers—muttering and moaning ; eyes turned up, whites of the eyes only visible ; muscæ volitantes ; picking at the bed-clothes ; complete unconsciousness of what is passing before him ; involuntary stools ; pulse small and intermitted.

Brandy and water ad libitum.

Nine P.M. The pulse has risen a little, and he appears more sensible ; he puts his tongue out when desired, which he could not do before ; tongue furred ; has purged considerably ; says he sees various objects, and desires the door to be closed on certain imaginary beings ; is rather more loquacious.

Continue the brandy and water.

Eleven P.M. Is again running down very fast ; pulse very small and tremulous ; extreme agitation and trembling ; wanders continually ; low muttering delirium.

Sinapisms to the spine and epigastrium. Continue the brandy and water.

23. Nine A.M. The sinapisms caused

considerable irritation, but reaction did not occur. He continued progressively to sink, and died this morning two minutes after the visit.

*Collapse—Reaction—Use of Salines—No consecutive Fever—Recovery.*

JOHN SCREENOR, ætat. 40, a man of intemperate habits, residing in Queenstreet, was admitted September the 16th, at eight A.M. He was taken ill the day preceding, and was attended during the night from the Central Station. He complains of cramps in the legs and stomach; has not had vomiting; slight purging; extremities cold; skin of the hands shrivelled; pulse nearly imperceptible; tongue cool, and very foul; eyes sunk, lips blue, extreme thirst.

He has been hitherto allowed merely cold water to allay the thirst, but he says he prefers toast and water, which he was accordingly ordered, *ad libitum*.

Sinapisms to the spine and feet; hot bottles to the stomach; and sandbags to the hands.

Nine A.M. Extremities rather warmer; other symptoms the same.

Ten A.M. Extremities warm; is covered with a cold perspiration; tremors of the hands.

Directions were given to remove the sinapisms, as they had been applied two hours, and one was ordered for the epigastrium. Wine and water as a drink, as he prefers it.

Eleven A.M. No pulse at the wrist, slightly at the carotids; is bedewed with a cold perspiration; spasms recur occasionally.

℞ *Carbonatis sodæ*, ℥j.

*Hydrochloratis sodæ*, ʒss.

*Chloratis potassæ*, gr. v. ℥ *fiat pulvis omni horâ sumendus.*

One P.M. The pulse has returned at the wrist, and is rising rapidly; his shirt has been changed, the one he had on being soaked with perspiration; has had a gruelly motion; has taken some brandy and water.—Continue.

Three P.M. Has not had any brandy

and water lately. He says the pulse is again failing, but says he feels comfortable; no perspiration; skin dry and warm; countenance cheerful.

Repeat the brandy and water and salines.

Five P.M. Pulse good; extremities not very warm; tongue warm; feels easy.—Continue.

Seven P.M. The pulse is occasionally flagging; extremities warm; has been free from spasm since the morning; says he feels 20l. better; has not been purged lately; not made water.

*Mustard and salt foot-bath.*

Frictions were directed to the cervical spine, with a liniment of liquor ammoniæ and oleum terebinthinæ.

℞ *Hydrargyri submuriatis*, gr. v.

*Pulveris scammonii*, gr. x.

*Pulveris zinziberis*, gr. v.

℥ *fiat pulvis statim sumendus ex aquâ et saccharo.*

17. Nine A.M. Had a gruel-like stool during the night; vomited once; has not made water; slight spasms of the legs occasionally; pulse small; body warm; tongue moist, warm, very furred. Took

*Hydrargyri submuriatis*, gr. x.

*Pulveris zinziberis*, gr. x.

in a powder at 8, without effect.

Frictions to the cervical spine to be repeated.

*Enema c olei terebinthinæ*, ʒij. *statim adhibendum.*

℞ *Hydrargyri submuriatis*, gr. v.

*Pulveris opii*, gr. ʒ *conf. q. s.*

℥ *fiat pilula bis in horâ.*

brandy and water as drink.

Eleven A.M. Is going on well; pulse a little fuller; has only had one pill; complains of hiccough.

℞ *Ætheris rectificati*, ʒss.

*Spiritus ammoniæ aromaticæ*, ʒss.

*aquæ*, ʒx. *M. fiat haustus statim sumendus.*

Continue the pills and the brandy and water.

One P.M. Remains free from pain; hiccough continues; has made water, and had another gruelly evacuation.

*Rep. omnia.*

Three P. M. Is easy and comfortable; hiccough gone; pulse rising; continue.

Eight P. M. Pulse small and frequent, readily perceptible; is warm, and free from pain; tongue very foul and black; has not vomited or purged since the morning.

R *Hydrargyri submuriatis*, gr. x.  
*Pulveris scammonii comp.* gr. xv.  
M. *fiat pulvis statim sumendus.*

Ten P. M. Complains of great drowsiness. Medicines have not acted. Pulse strong and quick, 80. Face and neck warm; temperature not much above the natural standard. Tongue very foul.

13. Seven A. M. Has slept well during the night. Pulse strong and full; bowels not open.

*Repetatur pulvis.*

Four P. M. Pulse full and strong. Has had a senna draught, and the bowels are open; stools black.

R *Hydrargyri submuriatis*, gr. x. *Fiat pulvis statim sumendus.*  
*Hanusus niger c. tinct. cardam. comp.*  
3iij. *duabus horis sumendus.*

Nine P. M. Has had another very dark stool; pulse full and frequent; tongue foul; very much coated.

19 Nine A. M. Has slept during the night; bowels have been freely opened; the evacuations are of a more healthy appearance.

Eight P. M. No head-ache; is less inclined to sleep; bowels open four or five times to-day; tongue cleaner, but still covered with a brown fur in the centre.

20. Is going on well.

R *Hydrarg. submur.* gr. ij.  
*Pulv. aromat.* gr. iv.  
M. *Fiat pulvis bis in die sumendus.*

21. Improving; complains merely of borborygmi.

R *Hydrarg. c. creta*, gr. x.  
*Pulv. aromat.* gr. ijij.  
M. *Fiat pulvis bis in die sumendus.*

22. Pergat.

23. Convalescent.

In the course of four or five days after the last report, Screenor was discharged cured.

STEVENS'S HOSPITAL, DUBLIN.

*Case of Compound Fracture of the Skull treated by Mr. Cusack.*

JAMES FAGAN, aged 23, a tall and powerful man, rather full than otherwise, admitted into Stevens's Hospital at 12 o'clock of the night of the 17th of March, 1832, received a severe wound, five inches long, from a dragoon's sword (convex on its cutting edge), over the right parietal bone. The sword had cut through the bone and membranes of the brain, as some cerebral substance appeared on the lips of the wound. When admitted, he was violent and incoherent, roared very much while being dressed, answered questions with reluctance, and then incoherently; vomited twice, skin warm, pulse 92, and weak. The wound was inflicted about half an hour before his admission. When struck, he fell forwards, and lay insensible for five minutes, then leaped up, made a rush at the door, as if to escape, but fell again. He had been drinking for some hours when he received the wound.

March 18. Present state. He lies on his side as if asleep; his eyes closed; when roused and asked a question, he moans and answers peevishly, but often intelligibly. His whole aspect and manner is that of a person oppressed with drink and sleep. When much roused, he can tell where he received the injury, but not how. Says he has a pain in his head, points to the wound with his hand, and immediately relapses into a state resembling tranquil sleep. Surface of the body warmer than natural; pulse 83, small and variable, becoming rapid when he moves, or is raised in the bed; tongue moist, but brown in the centre. Pupils of equal size, contract on exposure to light; has some cough, which seems to distress him very much, for when it attacks him, he grasps the bed with both hands, and groans with agony; has vomited four or five times during

the night. On removing the dressing this morning, a good deal of cerebral substance mixed with blood escaped from the wound.

*℥xvi. of blood were taken from the arm.  
Ordered a bolus of calomel and jalap.  
Fever diet.*

March 19. The bolus has not operated, was probably rejected by vomiting. A pint and a half of urine drawn off by the catheter last evening. Got some sleep; did not rave; is more sensible; answers when spoken to, but still with reluctance; would not allow the catheter to be passed this morning, but about a pint of high-coloured urine voluntarily passed afterwards. Pulse 75, soft and regular. Tongue brown at the centre.

*Ordered a purging enema.*

March 20. More torpid to-day; moans frequently; complains of pain in the head; pulse 55, when he lies quietly, but when he is disturbed, it rises to 80. Pupils natural; no stool; he will not show his tongue.

*℥xxx. of blood taken from the arm.  
Pills with calomel and colocynth, and a cathartic enema.*

Wound glued together by lymph and pus.

March 21. Bowels well freed; stupor not so great; pulse 68; puts out his tongue when desired; passes his urine voluntarily; wound looks clean.

*xxiv leeches to the head; a cathartic enema.  
2 gr. of calomel every 3 hours.*

He continued much in the same state, but gradually becoming more sensible, until the 24th, when he appeared more torpid, and at four o'clock p. m. he had a violent convulsive attack, four men could scarcely keep him in bed; three hours afterwards he had another fit equally severe, which was followed by great stupor. As there were now evident symptoms of irritated and probably compressed brain, it was determined, in consultation, by Mr. Crampton, Mr. Peile, Mr. Collis, Mr. Wilmot, and Mr. Cusack, to lay bare the wound in the skull freely, and then to act according to circumstances

respecting the removal of a portion of the bone. As a considerable quantity of brain had escaped from the wound in the first instance, it was obvious that both tables of the skull, the membranes of the brain, and the brain itself, had been divided by the sword, and it was probable that the inner table of the skull had been separated from the outer, and driven in upon the brain: and such, upon a careful examination with the probe, seemed to be the case. A slip of bone, about  $\frac{1}{2}$  of an inch broad and three inches long, was removed from the upper edge of the divided bone, by means of a straight saw, about four inches in length; the operation was performed by Mr. Cusack, and was effected in a very few minutes, and with great ease. On removing the slip of bone, it was ascertained that the inner table was detached, so as to form an acute angle with the outer table. Some softened cerebral substance escaped from the wound; he had one slight convulsive attack after the operation, but he soon became much more sensible, and now (four hours after the operation) he lies tranquilly with his eyes open.

March 25. Had a convulsive attack at 10 o'clock last night, but is quite free from stupor this morning; answers questions freely; pulse 76, small and weak; complains of his head. Every thing went on favourably until the 27th of March, when a small red pulsating tumour, about the size of a pea, appeared in the centre of the wound.

*Ordered ℥i. of infusion of cinchona three times a day.*

March 28. The fungus has doubled its size; is of a light purple colour, and pulsates slightly; wound granulating; general symptoms favourable; no material change occurred in the local or general symptoms, until the 13th of April, when the fungus began to enlarge considerably, and he became more torpid and irritable; complained of pain in the head; the fungus pulsates strongly, and is as large as a small walnut. About the 16th of

April the fungus began to decline rapidly in size ; the general symptoms at the same time became more favourable. On the 20th the fungus had disappeared, and about the 1st of May the wound was completely healed.

Fagan was discharged from the hospital on the 15th, in good health, but his memory was much impaired ; he was able, however, to resume his work as a pipe-maker. I saw him this 20th of July, 1832 ; his health is excellent, but his memory of words but not of things is greatly impaired ; he told me, " he knew every thing as well as ever he did, but he could not put a name on any thing." I showed him a button, he laughed, and said, " I know what it is very well, it is a ba, ba, ba,—Och ! I can't say it, but there it is," pointing to a button on his own coat.

*Observations.*—I think it probable, that had the portion of depressed bone been removed in this case in the first instance, namely, the 17th of March—or had the operation been delayed until the 25th or 26th of March, the result would not have been so favourable. The operation, in the first instance, would have been an additional violence to parts already severely irritated, and consequently an additional source of inflammation ; it would besides have removed all support from the wounded brain, a great part of which would, it is probable, have escaped through the opened dura mater. If the patient escaped these first dangers, then came the danger of hernia, or rather fungus cerebri—one of the most frequent and dangerous consequences of wounds of the dura mater. Had the operation been postponed even for a few hours after decided symptoms of cerebral irritation (as evinced by the convulsions) had set in, it would have but aggravated the mischief, by irritating parts already in a state of incipient inflammation\*. That operation may be re-

sorted to with advantage, even after the appearance of symptoms, which, if not relieved, almost invariably proceed to a fatal termination, is an important fact which has not perhaps been sufficiently insisted upon ; there are some most interesting cases which illustrate this point of practice, reported by Mr. O'Halloran, in the 4th volume of the Transactions of the Royal Irish Academy. As the work is not usually to be found in medical libraries, I shall give the substance of two of the cases in as few words as may be.

Pat. Kelly received repeated blows on the left parietal bone, which produced a very extensive fracture, with a contused wound of the integuments. He went on tolerably well for about ten days ; he then became heavy and drowsy ; the complaints increased, and when I was sent for, he was comatose, and so much oppressed, that I apprehended an operation would be useless, and had some thoughts of immediately returning ; but reflecting on the great resources of nature, I removed the integuments, applied the trephine, and elevated the depressed bone. Immediately after the operation, he opened his eyes, knew me, and spoke. Eight days afterwards I removed a loose piece of bone of considerable size. The next day he had paralysis of the opposite side ; he laboured under this partial paralysis for fifteen days, and then gradually recovered.

I visited Pat Hayes, who, thirteen days before, had received a blow which made a profound depression on the posterior superior part of the right parietal bone ; the pulse was slow and

those which are caused by the disorganization of the brain, consequent on inflammation. The first appear to be an epileptic character, and are probably connected with a disordered state of the fractures, rather than of the structure of the brain, and are comparatively attended with but little danger.

The second usually appear in connexion with strabismus and coma at the termination of the train of symptoms called "secondary," from their occurring several days, or even weeks, after the injury has been inflicted, and it is scarcely necessary to add, that they are almost invariably the forerunners of death.

\* The convulsions which are caused by irritation of the brain, and which, not unfrequently, appear shortly after a severe injury of the head, are of a very different character from

weak, but regular; he was quite comatose, and could not articulate. The bone was crushed into bits, and was driven in upon the brain, wounding the dura mater in some places. By means of the probe, forceps, and elevator, (without the trephine,) I relieved the dura mater of all incumbrance. In some time the dura mater rose to its natural height; the diseased parts sloughed off, and he recovered.

If there be any rule of surgical practice more dogmatically laid down than another, it is that which inculcates the necessity of removing all extraneous matters, including splinters of the fractured skull, which being driven inwards, wound the brain, or its membranes; even Desault, who carried his repugnance to the use of the trephine beyond what most surgeons would even now think reasonable, considered this an excepted case. He advises "the fragments to be extracted by the means of forceps, and if this cannot be effected, recourse must be had to the trephine." It would appear, however, from the following case, that even this rule is liable to exceptions.

In the month of September, 1818, Mr. Henry Brougham, a fine, intelligent, and active youth, about 18 years of age, received the contents of a fowling-piece, loaded with snipe-shot, in the centre of his forehead, by the following extraordinary accident. Holding his gun by the upper part of the barrel, he struck the stock obliquely downwards against the bar of a gate, which he wished to push open. The hammer was resting on the copper cap, which it compressed with the whole force of the spring; this pressure, aided by the vibration communicated by the stroke of the stock against the gate, was sufficient to make the detonating powder explode. From the oblique direction of the barrel upwards, the shot did not strike point blank against the forehead, but somewhat obliquely; it was, however, sufficiently direct to carry away an oblong piece of the integument of the fore-

head, nearly three inches in diameter, to fracture the os-frontis into small pieces, and to drive the greater number of them deep into the substance of the brain. Mr. B. was carried, in a state of insensibility, by some country people, to a cottage, where he was soon visited by a medical practitioner who resided in the neighbourhood, who took some blood from his arm, but did not meddle with the wound. I saw Mr. B. on the following day: he was perfectly sensible, his pulse about 80, small and regular. He distinctly described to me every thing that had occurred previously to the going off of the gun; he told me, that when he felt the shock, he had a vague kind of consciousness of what had happened; he raised his hand to his forehead, and feeling so great a wound, he concluded that the shot must have passed through his head. In order to ascertain if it were so, he remembered having passed his hand to the back of his head, where, finding the hair clotted with blood, he concluded that the shot had passed through, and that he had but a few moments to live, "and then (he added in a voice, which for the first time was tremulous) I thought of my mother\*." The head and face presented a frightful spectacle. The eyes were closed by the great swelling of the eyelids and cheeks. The skin of the face, which was perforated in many places by the shot, was covered with coagulated blood, rendered blacker by being mixed with gunpowder. The principal wound occupied the centre of the forehead, exactly where phrenologists place the organs of eventuality and comparison; here there was a wound of a circular form, above two inches in diameter, and nearly an inch in depth; the bottom of the wound, which rose and fell with every pulsation of the heart, was covered with a mixture of coagulated blood, disorganized brain, fragments of bone, and some of the wadding of the gun.

\* Mr. B. was the only son of a widowed mother; his father was brother to the present Lord Brougham.

Having cleared the face and head of the coagulated blood, in which they were in a manner incased, I proceeded to clear the wound of the extraneous matters which were lodged in it; but scarcely had I touched, with the forceps, a large fragment of bone, which was buried in the brain, when the whole body was shaken by a convulsive movement, and he moaned deeply. Of course I desisted from all further attempts to extract the splinters, and determined merely to cleanse the wound, with tepid water, of the wadding and gunpowder which lay on its surface: but scarcely had three drops of water fallen on the part, when he cried out in a voice more expressive of terror than of pain,—"Oh, don't! Oh, what's that?" I asked him if I had hurt him. He said, "I do not know, but the sensation is dreadful." I now gave up all further attempts at even washing the wound, and merely covered it with a piece of soft lint. The rest of the treatment may be described in a few words. Leeches were applied in large numbers daily to the forehead and temples; iced water to the head, generally; attention was paid to the bowels; iced water and iced lemonade was the only sustenance which was allowed for six days; and, at the expiration of this time, he was conveyed (eight or nine miles) on a litter from the miserable hovel in which he lay, to his mother's house in Sandymount. The local treatment was equally simple. The discharge from the wound was gently wiped away from the face as often as was necessary. This discharge contained for several days a large proportion of softened brain, mixed with blood; but the wound itself was not so much as washed for twenty-two days, and even then, nothing more was done than to lift off the small fragments of bone, as they became detached by the process of nature\*. This great wound was com-

pletely healed in two months, although small spiculæ of bone were discharged from time to time, for more than a year afterwards. The cicatrix, when healed, was deeply depressed, and pulsated like the fontanelle in the head of an infant. Mr. Brougham resumed his studies in Trinity College, and graduated at the end of the year. I met him by accident, six or eight years afterwards, and recognized in my old patient one of the most amiable and valuable clergymen in Ireland. How far the mental phenomena recorded in either of those cases may be consistent with that part of phrenology which gives "a local habitation and a name" to each faculty of the mind, I do not pretend to decide; but I take it for granted, that those who are deeply versed in the science will find no difficulty in offering an explanation of the facts.

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#### BOOKS.

The Dublin Journal of Medical and Chemical Science, No. V., for November.

A Critical Inquiry respecting a New Membrane of the Eye, discovered by Mr. George H. Fielding, and described by him in a Lecture delivered at Oxford, before the late Meeting of the British Association for the advancement of Science. By WILLIAM GORDON, F.L.S. M.R.C.S. Edinburgh. 1832. 8vo. pp. 42. London: Simpkin and Marshall; S. Highley, & John Taylor.

This Essay is a refutation of an alleged discovery, and is temperately written. It proves its author well versed in the anatomy of the eye.

Published by the Authority of, and dedicated by Permission to, His Majesty's Most Honourable Privy Council—The Substance of the Official Medical Reports upon the Epidemic called Cholera, which prevailed at Dantzic, between the end of May and the beginning of September, 1831, as translated to their Lordships; being an Analysis of the epidemic founded on actual observation and accurate inquiry; with important and well-authenticated Facts relative to the Disease in other parts of Europe. By JOHN HAMMETT, M.D. 1832, 8v. pp. 180, with a Map. London: S. Highley.

When we state that the first Board of Health,

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the adhesive inflammation to take place; this circumscribes the depressed piece, hardens the surface of the brain, and thus enables us more readily to lay hold of the fragment of bone."—*Practical Precepts*, p. 20.

\* Mr. Colles, with his usual sagacity, warns the surgeon from removing fragments of bone from the brain for a few days after the wound has been inflicted, "in order to give time for



composed of the Royal College of Physicians, not one of whom had seen a single case of cholera, compared this work to that of Aretæus, the reader can form a correct opinion of it. It is unquestionably the best, most graphic, and scientific account of cholera hitherto published, and is worth the whole of the volumes on the subject. Every statement made in it relative to the appearance of the disease in Dantzic is authenticated by the autograph of the British Consul there, and every page of it bears the clearest marks of truth, candour, and science. Nevertheless, it has ruined the prospects held out to the author by the government, because he is a non-contagionist, and because, like an honest man, a true philosopher, and really scientific physician, he preferred truth to place, title, and self-interest. He was not to be bribed or purchased; and, like Hippocrates, he despised the enemies of his country and of his species. He shall have his case submitted to the profession; and we only regret that the absurd, or humbug law of libel prevents us from speaking the truth, and exposing to derision, and the utter contempt of the profession, the base and rascally conduct of those who induced the government to violate their promise of promotion and reward should his reports be approved of. In our next we shall expose knavery, so far as the law allows us to venture. "O! that we had the power to whip such rascals naked through the world." Let none imagine that we mean, or allude to, our renowned contemporaries of the present Board of Health, worthies now extravagantly paid by our unequalled Whig Ministry for doing nothing. With all their folly and chicanery, they had their equals in the field.

#### NOTICE TO CORRESPONDENTS.

*A Surgeon.*—We should be happy to insert our Correspondent's Query to the Professor, but we really do not comprehend how we could with propriety put the question publicly.

Reminiscences of an Army Medical Officer in our next.

*Medicus.*—The Letter will appear next week.

*A Georgian.*—Press of matter obliges us to decline inserting the last communications. Good Lectures on Materia Medica would be acceptable.

The members of the profession who consider the damages awarded in the case of Ramadge v. Ryan excessive, have commenced a subscription to enable the defendant to apply for a new trial, or defray his expenses.

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*Erratum.*—In Professor Cooper's 3d Lecture, p. 354, col. 1, line 20, for *quality*, read *qualifies*; and in the 4th Lecture, p. 387, col. 1, line 6, for *ulceration*, read *inflammation*. Col. 2, eighth line from the bottom, for *modification*, read *mortification*.

# London Medical and Surgical Journal.

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VOL. II.

## LECTURES

ON THE

## PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

Delivered at the University of London,  
SESSION 1832—1833,

BY

PROFESSOR SAMUEL COOPER.

LECTURE VI., DELIVERED OCT. 15, 1832.

GENTLEMEN,

In the last lecture, I was considering the causes of inflammation, and in what manner they are influenced by various circumstances. Excesses in diet, indolence, and the porter, brandy, and gin-drinking propensities of certain individuals, generally communicate a strong predisposition to inflammation. Persons of these habits not only become predisposed to inflammation, but they bear it and get through it very unfavourably; in fact, they are bad subjects for disease in general, which usually makes them its victims without much difficulty. Every surgeon of experience knows, that they do not recover well from operations, unless prepared for them by bleeding, low diet, and a suitable regimen. Without some kind of preparatory treatment, trivial operations on such persons often have an unsuccessful result. Unfortunately for them, circumstances do not always afford an opportunity for preparation, or previous measures: perhaps a bad compound fracture, or some other severe accident, is met with, rendering immediate amputation necessary; the limbs are so shattered, that the patients must submit, as the only chance, and, in the language of the poet, they may be said to be

“ ——— sent to their account

With all their imperfections on their heads.”

A sedentary, studious life, united with habitual indulgence at table, invariably creates a strong predisposition to inflammatory affections, and sometimes either communicates a gouty

diathesis, or, if such already exist from hereditary causes, brings it into action, so as then to become actually an *exciting* cause. Amongst the predisposing causes of inflammation, we should ever remember such peculiarities of constitution, because they explain to us why some individuals are affected with gouty inflammation, some with rheumatic, and others with scrofulous inflammation, though all of them may be living, perhaps, nearly in the same manner.

We come now, gentlemen, to the consideration of the *exciting causes of inflammation*, which are frequently mechanical injuries of one description or another, as wounds, fractures, bruises, sprains, friction, pressure, or irritation, caused by the presence in the body of extraneous substances, as bullets, pieces of wood, glass, &c. Various stimulating applications, and things which have a chemical action on the textures of parts, must likewise be enumerated among the exciting causes; such as caustics, fire, and heated substances; but, perhaps, the most common of all the exciting causes of inflammation is cold, which seems to act sometimes *directly* on the part, and, at other times, *indirectly*. Examples of the first mode of operation are afforded us in cases where the direct application of cold air to the mucous membrane of the larynx, trachea, or lungs, excites inflammation of it. But, sometimes we find the action of cold indirect, as when it gives rise to an inflammation not in the part immediately exposed to it, but in some distant part. Thus, in one person the application of cold to the feet will cause inflammation of the chest, in another, inflammation of the throat, and, in a third, inflammation of the bowels. In such cases, gentlemen, it must be manifest to you, that cold acts as an *indirect*, and not as a direct exciting cause of the disorder. But there is yet another way, in which cold acts as a cause of inflammation: if any part of the body be exposed for some time to the influence of a very low temperature, and be afterwards *suddenly* warmed, a violent inflammation will generally be produced, which it is very difficult to check or control. We see this fact exemplified in chilblains. In this

manner, even a considerable portion of the body, as, for instance, a whole limb, may be destroyed by a rapid form of mortification. Here, gentlemen, cold acts only as the predisposing cause of inflammation, the sudden application of warmth being in this particular example the true exciting cause. Gentlemen, we see other inflammations, which are ascribable to another principle, namely, the sympathy of the part affected with some other part that is in some way or another disordered, or irritated. Thus particular kinds of food and medicine, introduced into the stomach, will produce peculiar inflammations of the skin: for example, in some constitutions, the employment of mercury will bring out what is called the *mercurial erythema*, and certain kinds of foods will induce an eruption on the skin, resembling urticaria, or nettle-rash. In the Memoirs of the French Academy, numerous facts are stated, illustrating this species of sympathy. There, gentlemen, you will find the history of cases, where inflammation and abscesses took place in parts of the body sometimes exceedingly distant from those which had been originally injured. The late Mr. Rose, in an interesting paper contained in one of the volumes of the Medico-Chirurgical Transactions of London, has related several instances, in which persons with gun-shot wounds died, not immediately of these wounds, but of mischief subsequently produced in other parts, which were at a distance from those which had been originally injured, and in no way connected with them, but by some inexplicable sympathy. In consequence of ordinary wounds and operations, large abscesses will sometimes form in the lungs, liver, pericardium, or synovial membranes. Arnott, Cruveilhier, Cloquet, Maréchal, and others, have devoted considerable attention to this subject, the facts relating to which are of great practical importance, though not yet sufficiently understood. The subject attracted some notice about the middle of the last century, when injuries of the head were observed by Bertrandi to be sometimes followed by abscesses in the liver; but no notice was taken of the frequency of the consequence in other organs, nor was any attempt made to explain the reason of such occurrences. In the inflammation of veins, called phlebitis, depositions of pus in distant parts are also frequently noticed. Now, the greater number of modern surgeons would attempt to account for facts of this kind, by referring them to sympathy, but others incline to the doctrine, that these distant inflammations and suppurations are owing to the absorption of some deleterious matter from the seat of the original injury or disease.

*Fevers are sometimes the predisposing cause of inflammation*, and as the patients often get better about the time when such inflammation suppurates, the abscesses were supposed, by the old practitioners, to give rise to a favourable crisis in the malady, and were, on that account, denominated *critical abscesses*.

Gentlemen, it is now my duty to consider what is by far the most difficult part of the subject before us—I allude to the *proximate cause of inflammation*. This, I may venture to say, has puzzled all physicians and surgeons from the earliest ages to the present day. The proximate cause of inflammation may be said to be that on which the characteristic and essential phenomena of the process depend—that particular change or action which constitutes the very commencement of inflammation, and invariably accompanies all its stages. It is then the essential part of the disease, or disorder, whichever you may choose to call it. Boerhaave imagined that it consisted in a particular state of the blood—a viscosity, and a *lentor* of it, and that its globules took a wrong course, being forced into vessels not naturally intended to contain them. These circumstances, if they could be proved to be true, which the latter one really is, would have no claim to be considered as the *proximate* cause of inflammation; at most, they could only rank as *predisposing* or *exciting* causes. Whatever effect the condition of the blood may have on the phenomena of inflammation, it cannot be the proximate cause. This must be very manifest; because if inflammation essentially depended on the state of the whole mass of the circulating fluid, every part of the system ought to be inflamed; but we find that this is not the case, inflammation being restricted to particular parts, or only occupying a certain extent. Gentlemen, it is certain, that a larger quantity of blood than natural is sent to inflamed parts. This fact is universally admitted. If an incision be made in a part while it is inflamed, the flow of blood from it is more profuse, than it would be were the wound made in it at another period. This cannot be explained by reference to the action of the heart, because the heart propels the blood equally into all parts of the arterial system. The fact cannot be attributed to any peculiarity in the action of the heart; but must depend either on some increase in the diameter of the arteries leading to the part, or to some new power in them of propelling a greater quantity of blood towards the parts which are inflamed, and to which they are distributed.

There is certainly a great determination of blood to parts affected with inflammation; this we know, not merely from circumstances already mentioned, but from what takes place on other occasions. Amputation of the thigh is sometimes performed for disease of the knee, attended with considerable abscesses and inflammation, or for a very bad compound fracture of the leg, accompanied by profuse suppuration and extensive inflammation, common or erysipelatous. In such examples, the bleeding from the stump is unusually copious, and, as all surgeons of experience know, the number of vessels requiring ligatures is sometimes treble what it is in other cases. Many of the smaller vessels have acquired a vast increase of size. It is by the capillary vessels that the

principal phenomena of inflammation are accomplished. By the word phenomena, I wish to be understood to signify the increased redness and heat of an inflamed part; the extravasation of coagulating lymph in it or on its surface; the swelling and the suppuration. The diameter of these vessels is increased, so that they admit the red globules, though, in their natural state, they circulated only a colourless fluid, and were consequently not then visible. I showed you, in my last lecture, two inflamed tendons, and you saw numerous red vessels in them; but if these tendons had not been inflamed, you would have seen no vessels at all, for the injection would not have filled them, and given them the appearance which they exhibited.

But, in inflammation, you may ask, does not increased action, or the action by which redness, heat, swelling, and pain, are produced, imply something more than dilatation and turgescence of the vessels? It does not mean that these vessels are undergoing alternate contractions and dilatations; for, with the naked eye, we can see sufficient to prove that the phenomena may be produced by enlargement alone; neither, if we can trust to microscopical observations, are we to suppose that there is an increased velocity in the circulation of the blood through these capillaries, at least not constantly, for the experiments and observations of Dr. John Thomson, Dr. Wilson Phillip, and Dr. Hastings, tend to prove, that, so far from increased velocity of the flow of blood in the part being essential to the process, no sooner is inflammation established, than the velocity of the blood is frequently diminished. Some stimulants appear to quicken the circulation in the minute vessels of an inflamed part, and others to retard it. Hence Dr. W. Phillip supposed, that the proximate cause of inflammation consisted in a *debilitated state of the capillaries, and an increased action of the larger arteries leading to them*. Many surgeons do not give implicit credit to microscopical observations: however, as far as we can trust to them, we must admit, that the velocity of the circulation in the capillaries is *not always* increased in inflammation. It is curious to notice the opposite conclusions, which different persons deduce from the same facts. Thus, several ancient and modern authors admit the doctrine of obstruction in the capillaries; some, with Boerhaave, refer it to viscosity of the blood, and the error loci, or the entrance into small vessels of globules too large to be naturally contained in them; some, with Cullen, ascribe the obstruction to spasm and constriction of the capillaries; and others, with Wilson Phillip, to debility of these vessels. The doctrine of increased contractions and dilatations must, I believe, be renounced. John Hunter says, that, in inflammation, the muscular coat of the arteries does not contract: he, therefore, could not have been an advocate for such theory. By *increased action*, he rather meant, if I understand him rightly, dilatation of the arteries,

and great determination of blood to the inflamed part, the strong injection of its arteries with blood, the effusion of coagulating lymph, and other operations.

We are not to suppose, however, that simple determination of blood to a part constitutes the proximate cause of inflammation, or will necessarily induce it; the spermatic arteries of certain animals, which copulate at particular seasons, are then found to be much enlarged; and there is an increased determination of blood to the organs of generation. During the growth of stags' horns, the carotids are also vastly enlarged; yet, in both these cases, there is no inflammation; there is neither redness, nor swelling, nor pain. A simple increased flow of blood may render vessels fuller and larger, constituting what is termed *congestion*; this may be a predisposing cause of inflammation, but it is not inflammation itself. All we can safely conclude is, that inflammation is attended by a great determination of blood to the parts affected; that the diameters of the large arteries, leading to them, is increased; that, in this respect, such vessels are concerned in the process; and that the blood does not always pass with increased velocity through the capillaries of the part affected, at least through many of them; for, through some of those which end in the veins, it probably flows rapidly, because, when we open a vein in the arm, the lower part of which is inflamed, it is found that the blood flows from the puncture with greater quickness than under ordinary circumstances. With regard, then, to some of the capillaries, we are to suppose, from the microscopical experiments of the several gentlemen whom I have mentioned, that although the flow in them may be quickened, it is not always so, and occasionally is even retarded.

Gentlemen, you must perceive, that the proximate cause of inflammation is at best very imperfectly understood. The subject is so obscure, that I am afraid to trust myself any further into it. The remarks which I have been making apply only to *acute* inflammation, from which I will now pass to *chronic* inflammation. The vessels, in this form of the process, are by no means in the state described in the acute kind; there is not such turgescence and redness. Chronic inflammation is rather a perverted action of the discerning capillaries, or, as the French call it, a disorder of nutrition. There is sometimes an increased deposition of new matter into the part; and, in other instances, there is an augmented secretion from its surface, especially if it be a mucous membrane. Parts become, likewise, thickened and enlarged by chronic inflammation, which may be considered as a process requiring an increased flow of blood to them. In chronic disease of the testicle, the spermatic artery sometimes becomes as large as the brachial; a fact which has fallen under my own observation in several cases where castration was performed.

In the language of surgery, inflammation is

said to have several *terminations*. Persons unaccustomed to professional phraseology would naturally think, that the word *termination* here meant the conclusion or end of the inflammation; but the meaning of the expression is not always so precise, or agreeable to common sense. Perhaps, after having existed a certain time, inflammation either subsides entirely, and the part returns to its natural and healthy state again, which may rightly be called a termination of the disorder, or a change of action in the vessels of the inflamed part is then induced, occasioning the production of a peculiar fluid, called *pus*. Now suppuration, or the process by which this *pus* is formed, is usually reckoned one of the *terminations* of inflammation; but this expression is incorrect, inasmuch as the inflammation does not always end when suppuration takes place, though considerably modified. Then another termination of inflammation, as it is technically called, is in *mortification*, or the death of the part, or parts, affected. When the inflammation is about to end in the first manner, which is indeed a termination, and always the most desirable issue of the case, the pain becomes less, the effused coagulating lymph and serum are, by degrees, absorbed; the swelling, tension, and throbbing subside; the fever and other symptoms entirely cease; the parts recover their natural size and functions, without any formation of *pus*, or any permanent injury of structure. This is not only the most favourable but the most common way in which inflammation terminates: and such an end of the disorder (for it may, on every account, be regarded as an end) is termed *resolution*. The accomplishment of it is generally what the surgeon principally wishes and aims at, whenever the inflammation is in a state to afford any chances of it.

Gentlemen, one termination of inflammation, characterized by an unusually sudden decrease of pain, and disappearance of all the local symptoms, and by a rapid and almost unaccountable shrinking and shrivelling up of the part affected, is termed, by the French surgeons, *delitescence*. It is only a modification of the kind of termination usually denominated by us, *resolution*; and the other phrase, which is not commonly employed by English surgeons, may be superfluous. Another termination of inflammation is in *suppuration*, which, as already noticed, should rather be called an *occasional consequence* of inflammation, than a *termination* of it. In this process of suppuration, the vessels acquire the power of producing *pus*, which either collects in the texture or substance of the inflamed part, so as to constitute an *abscess*, or is poured from the surfaces of ulcers, wounds, and mucous membranes, in the form of *discharges*. It is rather a modification of the inflammatory action, than a cessation of it: indeed, in acute inflammation, the parts around the matter first produced are generally most violently inflamed; and we know, that, in the circumference of the

abscess, there is more or less of the adhesive inflammation going on, by which the cells of the cellular tissue are filled with coagulating lymph, and the *pus* prevented from becoming diffused.

Another manner in which inflammation is said to terminate, is that in which the vessels of the part lose all power of action: they no longer, therefore, circulate the blood; and the part is converted into a cold, insensible, black, or dark-coloured mass. This termination is *mortification*, which is the most unfavourable and dangerous issue; but it only takes place when the inflammatory symptoms are exceedingly violent, or when the patient's constitution is under the influence of some remarkably disadvantageous circumstances; or when the inflammation has been attended by some peculiarity in its nature. This is always the case in *carbuncle*, and, on a smaller scale, in *boils*. In carbuncle, an extensive mortification of the cellular membrane under the skin takes place; and in boils, we observe the same fact, for there is always a core in them, as it is called, which is only a portion of sloughy cellular substance. The old surgical writers mention other terminations of inflammation, as, for example, *scirrhus*, though by this term they meant nothing more than a simple induration, and not, as according to the modern sense of the word, that condition of a part which precedes cancerous ulceration, and exhibits the texture of a well-marked organic disease. But, gentlemen, this occurrence of *simple induration* does not deserve the name of a termination, any more than some of the other consequences which I have noticed. Almost all inflammations produce a degree of hardness in the parts affected, which continues sometimes a long time after the cessation of the acute stage of the disorder.

Another so called termination is where *acute* inflammation becomes *chronic*: after the process has continued for some time, the symptoms abate considerably, the redness, swelling, tension, pain, throbbing, and heat, subside, or, if the redness and swelling should still continue, they go on unaccompanied by much heat, throbbing, and pain. The vessels appear to be dilated, as it were, from simple relaxation and loss of tone, and one might almost be inclined to adopt, with Dr. Wilson Phillip, the supposition of debility in the capillary system. In inflammations of the eye, the patient, after a time, is able to bear the light, and does not complain of much pain; yet the redness may still remain, and the conjunctiva and its vessels seem considerably relaxed. Gentlemen, another fact relative to inflammation is, that when parts have once suffered from it, they are more disposed to fall into the same state afterwards from slight causes: there remains behind a greater tendency to inflammation. Hence, some persons are repeatedly annoyed with inflammations of their eyes; some with inflammations of their joints; some with inflammation of their

throats; and others with inflammations of their chests.

Now, gentlemen, the next thing to be considered is the *treatment of inflammation*. *Resolution* being the most favourable termination of it, is of course the object to be held in view. Dr. Wilson Phillip's theory leads him to believe, that inflammation is attended with debility of the capillaries, and that resolution is brought about by the increased action of the larger arteries removing this supposed condition of the minute ones; but I am humbly of opinion, that this hypothesis is by no means satisfactory. On the contrary, if the capillaries be already too much distended by the determination of blood to them, I should conceive that the increased action of the larger arteries, by sending a greater quantity of blood to them, might have the effect of gorging them still more. Again: if this theory were correct, it would follow that our principal aim in the treatment of inflammation would be to promote the increased action of the arteries, which is represented to be so desirable and useful; yet such practice is contrary to experience. The fact being once established, that inflammation is kept up by an increased flow of blood to the part, one main indication, which immediately presents itself, is that of lessening this determination of blood. Such indication cannot indeed be affected by any consideration of the state of the capillaries, or of the rate of the blood's motion in them. Nay, were it right to be altogether influenced by the condition of these vessels, I should argue, that the same indication would still be a most rational one, namely, that of diminishing the flow of blood to them. But, gentlemen, were we to be exclusively guided by the consideration of an occasional retardation, or absolute stagnation of the blood in inflamed parts, as is alleged to happen on the authority of microscopical observations, then, gentlemen, we might be inclined to act in the contrary manner, and encourage the flow of blood to the parts. But experience is the best arbitrator in this matter; and if we are unable to detect the proximate cause of inflammation in a satisfactory manner, or to reconcile all our theories about it with what we observe ourselves, or is observed by others, we have it in our power, at all events, to dismiss the influence of uncertain hypotheses from practice, and then trust alone to the dictates of plain experience.

Here, gentlemen, as in all other parts of surgery, first inquire into the *exciting cause* of the disorder, because if this can be removed, I need hardly say, it is the first indication. Indeed, until this be done, little good can be expected. Thus, where the exciting cause consists in the lodgement of extraneous substances in the part: for example, where there is a thorn or fragment of glass in the finger, the obvious indication—one which would immediately present itself even to persons out of the profession—would be to remove the irritating substance. Where the eye is inflamed from exposure to cold, of course this cause is

to be avoided. But, gentlemen, the removal of the exciting cause will not, in all cases, stop the progress of inflammation; for living parts, when injured, are capable of reaction, as displayed in the inflammation itself, which is often a salutary process, and necessary to restore the parts to their natural state. Thus, when a limb has been severely wounded by a bullet, or has sustained a compound fracture, a blow, or a fall, by which a solution of continuity in the parts has been occasioned, certain processes are requisite for the restoration of them to their original condition again, or as nearly to it as circumstances will allow. Now, for the completion of these processes, inflammation is absolutely essential, and here it is a salutary operation. This fact, gentlemen, will bring to your recollection what I stated on a former evening, namely, that inflammation is the most important subject for a surgeon to study, since it is connected with almost all diseases, either as a symptom, an effect, a cause, a complication, or even as a means or mode of cure. However difficult it may be to settle theories, the rule of practice, I think, will always remain the same, that is, to lessen the determination of blood to an inflamed part by bleeding, and other means calculated to reduce the force of the circulation.

Gentlemen, as I have now arrived at a part of the subject which requires more time for its explanation, than what remains to us this evening, we will, for the present, conclude.

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SELECTIONS  
FROM THE  
*CLINICAL LECTURES*  
DELIVERED AT THE  
HOTEL DIEU, IN PARIS,  
*During the Session of 1831-2;*

BY BARON DUPUYTREN,

PRINCIPAL SURGEON OF THAT HOSPITAL.

—  
LUXATIONS OF THE VERTEBRE.—SECOND  
OBSERVATION.

*Rupture of the Ligaments of the body of the  
Vertebra, with displacement.*

A MAN, between forty and forty-five years of age, a labourer in a quarry, being in a recumbent posture, received a quantity of earth on his loins, and sunk beneath the weight of the falling heap, after having made useless efforts to extricate himself. The patient was first carried to his own house, where he remained for three days, deprived of motion and feeling in the lower extremities. He was removed to the Hôtel Dieu on the fourth day. The superior part of the loins presented a large tumour, soft in the circumference, hard and raised in the centre, where manifest crepitation was

to be felt. On the side of the abdomen there was another tumour, resistant at all points, extending along the vertebral column, and placed on its course. The height of the abdomen was evidently diminished, and the base of the chest almost touched the ilium. There was, at the same time, complete paralysis of the lower extremities, and of the parietes of the abdomen. The bladder was distended, and also paralysed, letting the urine flow involuntarily, and by regorgement. The fecal matter was retained, and the abdomen was large and soft; the pulse was, however, small and contracted, the respiration short and difficult. The patient complained of dull pain in the dorsal region. The intellectual faculties had not sustained any alteration. The tumour of the loins, and that of the abdomen; the crepitation that was heard at the back, and the approximation of the chest and the pelvis; the paralysis of the lower extremities and of the bladder, clearly indicated that there existed a solution of continuity of the vertebral column with displacement. The fifth and sixth days after the accident, the paralysis extended to the left superior member; the motion of the right side became slow and uncertain. The seventh day the respiration became more difficult, and was no longer executed except by the diaphragm, and the patient perished by asphyxia, from the continued interruption of the mechanical and chemical phenomena of respiration. On opening of the body, soon after death, under our observation, the transverse and articular apophyses of the last dorsal vertebra, and the first two lumbar vertebrae were found to have been broken. The body of the last dorsal vertebra and the first lumbar vertebra were separated from their apophyses, and from the body of the second lumbar vertebra, having passed before this last, and made a projection of more than an inch. The spinal marrow was lacerated and the pillars of the diaphragm torn; a large ecchymosis enveloped all the circumference of the vertebral column, but a rupture of the inter-vertebral substance which, in only one corner, had torn a very thin layer of the lumbar vertebrae.

### THIRD OBSERVATION.

A woman, about fifty-six years of age, of tall stature and great *embonpoint*, in going down stairs, tumbled headlong, and with great violence, on the posterior and inferior part of the neck, which was dashed against the edge of one of the steps. The patient was raised at the bottom, after having fallen twenty steps, without motion and feeling in almost all the parts situated below the neck. She suffered much all the night in the inferior part of this region, and was tormented with great thirst; she had not had any evacuation. The next morning she was moved to the *Hôtel Dieu*, and complained of violent pain at the base of the cervical region, which was augmented by the slightest touch, or the least movement that was attempted. The head and

neck were inclined forward, and a little to the right side, the posterior part of this last region being depressed and the superior part, towards the back, protruded. There was total loss of sensibility in the inferior members; the rectum, the bladder, the parietes of the abdomen, all seemed dead as far as the diaphragm. Above this point, the thoracic members were affected by imperfect paralysis of motion and feeling; respiration was hurried and laborious; but the voice, senses, muscles of the face, and intellectual faculties, had not undergone any alteration, and seemed as if belonging to a different individual. The pulse was full and soft, the tongue dry and slightly brownish, the skin in a natural state, under the relation of exhalation and vital heat. It was easy to judge from these symptoms that there was serious injury of the spinal marrow, caused by a solution of continuity of the vertebral column with displacement. The patient was bled in the arm, and at four o'clock in the evening the respiration seemed easier, the thirst less intense, and the tongue less parched; nevertheless, there was no doubt but the woman would soon expire; and during the following night, the respiration became stertorous, with difficulty of speech, the face became livid and convulsed, and the patient, whose intellectual faculties remained unimpaired during all the time, sunk in the morning.

Thirty-four hours after the accident happened, at a post-mortem examination, made by Doctor Pouqueville, under our inspection, an ecchymosis and bluish suffusions of the posterior part of the neck were observed; a posterior projection of the superior part of the dorsal column, and another in the opposite direction of the cervical region. The cellular tissue, and the subjacent muscles, were bathed with blood. The parts immediately adjoining the vertebral column were destroyed, and exposed to view the superior articular apophyses of the seventh cervical vertebra, whilst the sixth vertebra of this region was pushed half an inch before the last. In the interval between these bones the spinal marrow was to be seen drawing forward from behind, and from above downwards, compressed and flattened on the body of the seventh cervical vertebra.

The vertebral column, examined anteriorly, presented a very remarkable protrusion of all the thickness of the sixth cervical vertebra; this protrusion was surrounded with blood. The anterior ligaments of the rachis were destroyed, and the pharynx ruptured. The cervical portion having been carefully removed, the yellow ligaments were found torn, as well as the inter-vertebral substance that unites the sixth and seventh cervical vertebrae. This substance was ruptured in such a manner that two-thirds adhered to the seventh vertebra, while one-third remained to the sixth. On a particular examination of the vertebrae that had suffered displacement, it was perceived that the seventh cervical vertebra was entire in all parts; that the top of the sixth spinal apophysis was

slightly cut, as well as the edge of the inferior articular apophysis; all the articulations of the cervical vertebræ, situated above the luxation, were in the usual state; the seventh cervical vertebra, with the first dorsal, presented a mobility much greater than is usually observed.

A LECTURE  
ON  
MATERIA MEDICA,

BY JOHN EPPS, M.D.

At the Westminster Dispensary, 9, Gerrard Street, Soho, being an Examination of the Operation of

BLOOD-LETTING.

LECTURE II.

GENTLEMEN,

I HAVE, in continuation of the subject of blood-letting, to draw your attention this morning to the peculiarities and advantages of capillary blood-letting.

Leeches are the most common instruments by which we effect capillary blood-letting. It is, therefore, to these agents that the following remarks will principally relate.

It is a fact well known to practitioners, and even to the public generally, that the occurrence of a spontaneous hæmorrhage cures a disease. Such discharges are, therefore, often called *critical discharges*, and their importance has been appreciated. The benefits connected with such discharges have been more particularly manifested in cases of *inflammatory* disease.

It seems rather extraordinary, that, with this fact continually present, no means should have been adopted, with the view of producing *artificial hæmorrhages*. It may be imagined by some, that phlebotomy corresponds thereto, but this is not the fact; for, by phlebotomy, a large quantity of blood is drawn rapidly from the great vessels; whereas, in a hæmorrhage, the blood generally trickles or flows gently, and it flows from the *extreme vessels*. But there is a still greater and more important point of difference between a hæmorrhage and phlebotomy, or arteriotomy. In every spontaneous hæmorrhage there occurs a *determination*, a *vital determination*, of blood, what the French call a *fluxionary movement*. There is a peculiar agency of the vital power in the extreme vessels. But there is nothing like this in phlebotomy, or arteriotomy.

In illustration of the first point, the production of a vital irritation, and, in the production of this, the approximation of the effects from the leech-bite to the spontaneous hæmorrhage, I may remind you 1st. that the leech-bite is *triangular*, produced by a triple tooth; 2d. that the animal draws the blood by *suction*, which still further stimulates the part;

3d. that, after the bleeding ceases from the leech-bites, swelling, redness, pain occur round and at the places bitten; 4th. that the application of leeches to a part in a state of active inflammation very often occasions most distressing symptoms, the swelling being excessive in many cases.

In illustration of the third point of similarity, namely, *the difficulty of staying the bleeding and its frequent cessation of itself*, we may remark, how often are we called to patients, to whom we ordered the application of leeches, whose friends are in great terror because the bleeding will not stop. The linens are soaked, every plan has been tried, but without success. Nature would not be interfered with. At last (there is something magical, so patients think, in the medical man's touch) he stops the bleeding, but why? because, by the time he arrives, the bleeding has effected its purpose.

I need hardly intimate, that, in some cases, the bleeding may depend, for its continuance, not upon the cause just noticed, but upon the circumstance that the leech has bitten a small vessel. Then it will be necessary, in many cases, to use means to stay the flow of blood. It would be almost an insult, even to the youngest member of our profession, to tell him, that he is not to let his patient bleed to death, because he may imagine that the bleeding from a leech-bite is, in many cases, highly useful.

I think that I have thus fully established the view, that there is a very great similarity between the agency of leeches and of a spontaneous hæmorrhage.

Before mentioning the cases in which leeches can be, as thus acting, beneficially employed, it seems proper to make some remark upon the phrase *local bleeding*, frequently applied to the bleeding by leeches. This phrase is applied because it is imagined, that by the application of leeches the blood is drawn *directly* from the diseased organ. But this is not the fact. A current of blood is established by the leech-bite and the suction, so that though the blood first taken might be that existing, at the time of application, in the part, it soon ceases so to be. Besides, we find that leeches, applied distant from the part affected, produce, in a great many cases, much greater effect than when applied to the part itself. In France, leeches are very often applied under the clavicles to relieve bronchitis. We apply leeches to the epigastrium in gastritis; to the abdominal surface, generally, in enteritis, and also in peritonitis. It surely will not be said, that the vessels of the skin, covering these parts, have any *direct* communication with the vessels of the organs relieved by their application. We find, moreover, that when leeches are applied to the part itself, they increase the inflammation of the part, and increase the flow of blood to the part. The reasons of this, and the precautions connected with the use of leeches, will be noticed here-



after : at present, the fact is mentioned merely to show that the *local operation* of leeches, as connected with *their depletive character*, is not the source of the benefit derived from them. In fact, why should we not consider bleeding from a vein as much local, as bleeding from any particular part of the bodily surface. The only difference between the one and the other is, that we take the blood from a large orifice, in the other from a small : in the one, we take from a vessel *formed by the union of capillaries*, in the other, *directly from the capillaries themselves*.

Bearing in mind, gentlemen, the similarity between a spontaneous hæmorrhage and capillary blood-letting, as effected by leeches, and, also, that, in curing inflammation in an organ, we must obtain for it a state of repose, I shall now direct your attention to the use of leeches in the treatment of morbid affections.

We bled in pneumonia to *diminish the action* of the diseased lung, in the same manner as, in gastritis, we refrain from giving food. But as abstinence from food, as bringing quiet to the diseased stomach, is not sufficiently efficacious in removing the disease, as nature, in other words, requires assistance, so, in many inflammatory diseases, as in pneumonia, phlebotomy is not always sufficient to effect a cure. Medical practitioners often find that, in spite of the most active treatment by phlebotomy, the pneumonia continues, the respiration is still constrained, the skin is still livid. Very often we find that, under such circumstances, an *epistaxis* takes place, and with great benefit. Does not this indicate to us the application of leeches, which produce an effect so very similar to the hæmorrhage ? So that, gentlemen, I trust you now see the reason why capillary blood-letting will not cure pneumonia ; why phlebotomy alleviates the disease most rapidly ; and why the combination in the treatment of the disease of phlebotomy and capillary blood-letting is so useful.

The same relative effects of phlebotomy and capillary blood-letting, in other inflammatory diseases, are to be traced ; and, in the treatment of them, ought to be regarded.

Having thus explained the peculiarities in the operation of capillary blood-letting, having pointed out some of the differences between it and phlebotomy, I shall proceed to notice some of the diseases in which leeches can be employed with success.

It is principally in affections of the *stomach* and *bowels*, and parts therewith connected, that leeches have been found particularly useful. We shall consider the use thereof in such affections, and then notice the applications in which, under certain circumstances, they can be advantageously employed.

It may be necessary to remark, that very often do we find that the sudden disappearance of piles, or the causing suddenly the bleeding from piles to be stayed, has been attended with the supervention of gastritis or enteritis. What does this teach us ? The French practitioners

say, the lesson to be learnt is the strong and powerful sympathy existing between the vessels at and about the anus and the intestinal mucous membrane. And it also teaches us, they maintain, that in these diseases and in inflammation of the liver (with which gastritis or gastro-enteritis is often associated), the application of leeches to the *anus* is the most efficient mode of treatment. They carry this practice very far, and, in the opinion of some, unnecessarily far. Few practitioners have tried the plan in this country ; the ideas on delicacy being somewhat different in Britain and in France ; ideas which, in diseases of the rectum, constitute a source of great injury to the patient. When, however, gastritis or enteritis arise after the *suppression of a hæmorrhoidal discharge*, the application of leeches to the *anus* is one of the most effectual and the least exhausting of the means of cure. Relief is afforded by one-third the number of leeches that would be necessary to relieve the disease, if applied to the epigastrium. This application acts, as will be understood from what has been already stated in reference to the hæmorrhagic character of the discharge of leeches, very nearly as a *reproduction of the discharge itself*.

In cases of gastritis, occurring from other causes than the suppression of a hæmorrhagic discharge, leeches are to be applied to the *epigastrium* ; in cases of enteritis, *around the navel* ; in cases of peritonitis, *all over the abdominal surface*. In cases of severe colitis, or inflammation of the colon, to the *rectum* ; in cases of cystitis, to the *perineum* ; in cases of urethritis, the effect is much more powerful when the leeches are applied to the *orifice of the gland* than to the perineum. In cases of affections of the head, to the temples, and to the upper part of the neck, where the supply of blood is considerable.

It may be advantageous to enlarge a little upon each of these applications. In gastritis, in enteritis, and peritonitis, we apply to the surface the leeches ; and we excite, by the irritation produced by the bite, a degree of counteraction on the surface, which counteraction acts for a considerable time ; and, also, when we add to this the powerful sympathy existing between the intestinal organs and the skin (for examples I refer you, gentlemen, to my work on Counteraction, a copy of which I believe I have had, or shall have, the pleasure of presenting to each of you), we can readily understand how the peculiar modification of the nervous system, connected with the development of the gastritis, the enteritis, and the peritonitis, is relieved by the application of these useful animal beings.

There is another circumstance to which we should particularly attend, and it more especially refers to peritonitis. It is, that we should not cease to apply the leeches *till the pain is subdued*. I shall mention two cases as illustrative. They occurred to me when engaged graduating in Edinburgh, and, as occurring then, perhaps impressed my mind more

than such cases would now. A lady, who was delivered after a difficult parturition, was, on the eighth day, exposed to causes which induced inflammation of the womb. She was exceedingly ill. Bleeding by the arm had been practised; leeching also; fomentations also; but with no effect. I was called in; and I stated my opinion, that nothing but leeches would cure her. She had had leeches, and these had done no good; and this constituted a great objection to a second employment in the opinion of those busy bodies who haunt a female under such circumstances. However, after much persuasion, I induced her husband (by explaining to him that the non-effect of the leeches, previously applied, was, because an insufficient number was applied) to apply thirty to the hypogastrium, the part having been previously deprived of hair. The leeches had not been applied more than a quarter of an hour, when the patient exclaimed, "I am in heaven!" so great was the relief afforded.

Another case of enteritis in conjunction with peritonitis occurred. The patient was screaming faintly, or rather moaning, from the agonies she endured. I applied fifty leeches; they did not relieve. I ordered thirty more; in fact, I applied them myself, and she was relieved; and by diligent care she became well in about six weeks, although her medical attendants had stated that nothing more could be done for her; and one, a chief practitioner in Edinburgh, on hearing of her cure, said, "It is a miracle!"

In peritonitis, in particular, the *cessation* of the pain ought to be our guide in regard to the number applied. We can easily remove the leeches when the effect is produced. Each bite is a centre-point of irritation: it draws the diseased action to the surface.

The French practitioners see colitis where we, perhaps, should not; and they treat the disease with great success by leeches to the anus; and they consider that, in this affection more particularly, the application of leeches is servicable; for, although maintaining that leeches to the rectum are servicable in enteritis, they consider the *ilio-cæcal valve* forms a kind of boundary to the agency of the leeches applied to the rectum.

As a general rule, also, we may add, that *chronic inflammations* are more beneficially treated by leeches than by phlebotomy. In gastric and intestinal chronic inflammatory affections, the *hebdomadal* use of leeches forms one of the best modes of treatment, as has been fully established by Dr. Pemberton, in his valuable work on Diseases of the Abdominal Viscera; a work second to none on the subject in excellence.

In cases of bronchitis, the French use leeches to the inside of the nostrils, and with great success. In œsophageal inflammation, they apply leeches to the gums; and it has often struck me that, in cases of inflamed spleen, the same local application of leeches would be very servicable; for Celsus remarks, "Ubi lien

morbosum est, gingivæ sanguinem emittunt." There is one prejudice against their use, and that is, the fear patients have of swallowing them; and another objection against their use is, the leech will not bite if the saliva comes near him. In all such applications the leech-glass must be used. You will take care, however, not to put the leech in so that the head is situated where the tail should be, an occurrence which I have seen to happen with the members of the Royal College of Surgeons.

Leeches have been employed, and have been condemned, in *erysipelas*. Some say that they have derived the greatest advantages from their use; others have maintained that they always increased the inflammation. The solution of this contrariety of opinion is easily obtained by him who understands what has been already stated in regard to the operation of leeches.

In *erysipelas*, the skin is inflamed. What then do we when we apply leeches? We apply bodies which will produce so many centres of irritation. They excite, by their bites, an increased action in the skin, and thereby, although doing good in one way, effect a greater harm in another, by increasing the determination to the inflamed part. It is quite evident, therefore, that if we do apply leeches in *erysipelas*, we should not apply them directly to the inflamed part, but in the neighbourhood. The neglect of this simple regulation has been the cause of the use of leeches being condemned in this disease; and many, very many instances have I seen of severe tumefaction being occasioned by their application to the already tumefied *erysipelatous* surface.

In cases of *ophthalmia*, leeches are praised by some and condemned by others. Some maintain that they should be applied *directly* to the diseased conjunctiva; others, to the neighbourhood of the eye. How often does the swelling augment from the application? M. Lateno gives, as his opinion, that when the disease occupies only the *ocular* conjunctiva, the leeches should be applied to the *palpebra*; but when the disease occupies the *palpebral* as well as the *ocular* conjunctiva, then the application should be made in some healthy neighbouring part. Indeed, any one who understands what has been stated regarding the peculiarity of leeches, will find but little difficulty in the proper application in this as well as almost in every other disease. A correct general principle is invaluable.

In cases of *inflamed testicle*, arising from the sudden suppression of the gonorrhœal discharge, I know no means so efficacious as the application of leeches abundantly to the scrotum, and, at the same time, burying the penis in a poultice, so as to excite the discharge. The weakness produced is very great, but the good effect is very decided.

In *sciatica*, if relief is not obtained by proper evacuations from the bowels, I know no application, in full habits of body, more beneficial than leeches down the course of the sciatic

nerve. The reason is most likely apparent. The state occasioning the congestion affecting the nerve is removed, and its return is prevented by the counteraction induced by the leech-bites. I say in full habits of body, because in persons of a nervous temperament the application of a plaster, composed of the *emplastrum ammoniaci cum hydrargyro*, with the *ext. humuli lupuli*, is the best mode for obtaining relief.

Such are some of many of the beneficial applications of leeches: an enumeration which, I think, will be quite sufficient to impress us with the importance of the leech as an auxiliary in the treatment of many diseased states.

Before leaving the subject of capillary bleeding, it may be proper to consider whether *scarifications*, or bleeding obtained by the means of *cupping*, bear an analogy to capillary blood-letting, as obtained by leeches? This question is important, because it must be evident to every medical man, that the obtaining a substitute for leeches is very desirable, because it often happens, that when these valuable agents are wanted, they are not easily to be obtained; and when to this is added their price is so considerable as to exclude their use in many instances, more particularly in the diseases of the poor.

Some individuals have advocated, that bleeding by cupping is similar, or very nearly similar, to that by leeches. The points of similarity we shall first notice; then the points of difference:—

First, Blood is drawn in both from the capillaries; in cupping, however, large vessels are often wounded.

Second, The pressure of the atmosphere is taken off the part both by the cupping-glasses and the leech; for you are aware that the leech sucks similarly to the infant in making a vacuum.

Third, A slight irritation is produced by the numerous incisions.

These two modes of bleeding differ in the following respects:—

First, The pressure of the atmosphere is taken off by the leech by suction; in the other, by the vacuum in the glass: the one is an active agent; the other, a passive.

Second, The vacuum occurs only where the leech-bites are; the puffing of the skin takes place not only at the incisions made by the cupping instrument, but also between the incisions.

Third, After the fall of leeches, the flow of blood often continues; after the removal of the glasses employed in cupping, the bleeding stops.

Fourth, The inflammation forming an areola round each leech-bite is a more permanent counteraction than that produced by the incisions.

These differences, I think, sufficiently establish, that there is a great difference between the effects produced by leeches and those produced by scarifications.

Having thus noticed the uses of each mode of blood-letting, the remaining part of my

duty is to institute a comparison between their operation collectively.

The objections to the use of leeches are three-fold: first, the difficulty of ascertaining the exact quantity of blood; second, the increase of congestion occasioned by their application; and third, the great degree of weakness produced.

In reference to the difficulty of ascertaining the quantity of blood obtained by their operation, little need be said; the fact must be evident to any one who has seen their application. Now this does not hold good as an objection against phlebotomy; because, in the blood-letting by this operation, we can tell the exact quantity. This will always be an advantageous feature in the latter operation.

In regard to the increase of congestion, this is an advantage when the leeches are applied in suitable circumstances, and it is one of these operations, which renders the application of leeches so peculiarly beneficial. A counteraction is thus exerted on the surface; each point is a centre of inflammation, and the action is not short-lived, but continues a considerable period of time. In some cases we find that the leech-bites will not heal. When this is the case, I very seldom endeavour to hasten their healing, but apply emollient applications, and find much benefit to arise from promoting a discharge from them. This also constitutes one point of superiority of the leech over the lancet. The vein soon heals; little or no counteraction is produced by the incision, and the effect produced is, therefore, but very temporary.

In regard to the degree of weakness produced, it is very distressing, especially if the leeches be improperly applied; the degree of weakness is not proportioned to the quantity of blood: for the same quantity of blood, taken from the system by opening a vein, does not produce a degree of weakness at all proportioned to that produced when, so far as we can guess, the same quantity is taken by leeches. I stated, when the leeches are improperly applied; for it is a curious fact, in reference to the application of these remedial agents, that, when applied for the relief of a disease, which they are suited to relieve, they produce little weakness. In the same manner as opium can be given in doses under disease, which, under a healthy operation of the system, would be destructive to life.

There is another circumstance, tending to increase the weakness from the leeches themselves, and this is the delay occasioned by the unwillingness to bite. This vexes the patient, and the best way to obviate this is to put the leeches in a tumbler, or wine-glass, and hold it tight to the part, so as to exclude the air. This is more effectual than putting honey, or any other plan of which I have heard.

There is also another circumstance tending to increase the weakness from the application of leeches, and that is, the want of care in previously dressing the patient, whence it

happens that when one leech falls off before its neighbours (which is often the case), the blood trickles down on the bed, the bed clothes are wetted, and afterwards the patient is obliged to be removed from bed. Thus the benefits from the state of quiescence produced by the leeches are, in a great measure, lost.

By phlebotomy we obtain immediate repose to an organ. By capillary blood-letting we perpetuate that repose.

Arteriotomy is attended with one inconvenience which is very prominent, and that is, the difficulty of applying the pressure so as to stay the flow of blood. The temporal artery is that to which pressure can be most easily applied: and from this circumstance, in part, we may ascribe the frequency with which it is opened. Still the pressure must be itself injurious, and must tend to obviate the benefits that have been previously obtained.

Having thus finished my comparison, I shall make a few concluding observations at the commencement of my next lecture.

## CLINICAL LECTURES

DELIVERED BY

DR. ELLIOTSON,

Monday, October 29th, 1832.

### LECTURE III.

HEMIPLEGIA—BRONCHITIS—HYPERTROPHY OF THE HEART—ICTERUS.

GENTLEMEN,

AT my first lecture I gave you a list of the patients, then in the hospital, under my care, classing them according to the situation of the disease, and, in my succeeding lectures, I shall still continue to follow the same arrangement. I shall now state to you the cases that have been admitted since then. First, of the nervous system there have been admitted one of hemiplegia, one paralysis of the hands and feet, two of paralysis of the upper extremities, and three of epilepsy. Then, going to diseases of the chest, there was one asthma, two of disease of the heart, and one of chronic bronchitis. Then, of visceral disease, two of the liver, one of the spleen, two of jaundice, one of chronic gastritis, one of colic, and one of dysentery. And, proceeding lower still, we have three diseases of the uterus. Of those affections which are not confined to any particular part of the body, there are six of rheumatism, one of inflammatory dropsy, three of syphilis, and three of shamming.

Since I last had the pleasure of addressing you, there have been two deaths, both of which occurred after chronic affections, one of the nervous system, and the other of the chest. The case of hemiplegia proved fatal after nine

years' standing. The man being unable to speak, and no one coming with him, I was unable exactly to ascertain the previous history of his disease, except that he had been bad nine years. About three years ago, he was in the hospital, under Dr. Roots, for the same complaint, and was then taken with erysipelas, but went out cured of this, though the original disease still remained. A month ago, I admitted him with the same complaint, but could not learn his exact state: whether he had giddiness, or pain in the head; whether it arose from an inflammatory affection, or from some tumour, or induration of the brain, I could not find out. I, therefore, put him upon iodine, trusting to the chance of the symptoms being caused by effusion, chronic thickening of the membranes, or any alteration of structure. Iodine will frequently cause absorption, if there be any effusion or indurated tumour; but if there be any softening it will be injurious, for it will only be promoting absorption where it is already taking place,—no one remedy will do good in every case. Antiphlogistic measures are generally beneficial in cases of effusion, by assisting in promoting absorption; and many of these diseases are of an inflammatory nature. When there is congestion, whether attended with organic disease or not, antiphlogistic remedies will do good by retarding the progress of the disease, and lessening the fullness of the vessels; but if the pulse is small and feeble, and the patient is debilitated, then the antiphlogistic treatment would be injurious.

(Here the learned Professor made a few observations respecting a case of hemiplegia now in William's Ward, which bore him out in the opinion he had just stated.)

Some people recommend strychnine in these affections; but what good can be expected from it in organic disease? It is a stimulant and a deadly narcotic, consequently must be a useless remedy in these diseases. I have never seen it do any good, except when the paralysis arises from cold or lead, which affects the muscles of any particular part, without producing any disease of the brain. I have seen it do good in one case of paralysis arising from lead, and in one from cold, but never saw it do the least good where there was any organic disease of the brain. If paralysis arises from softening, or from inflammation, iodine will increase the mischief: it is only useful where there is something required to be absorbed. In this man I could not tell exactly upon what the disease depended; but as it had been of so long standing, and the pulse not being full, I presumed that there was not any slow inflammation going on, but possibly there might be some induration: effusion might have occurred, and the parts grown together, and become indurated, forming a sort of cicatrix; this is a very common process. After hemiplegia, we often find a part of the brain of a dark brown colour, and quite hard, having the appearance of a cicatrix. In this case I was quite at a loss

to know what to do for it. I gave the patient the hydriodate of potass internally, and rubbed the iodine into the scalp. It did no good, but I took care that no harm should result from it. Latterly he grew very weak, which is a common occurrence in this disease, and was suddenly seized, as he had been three years ago, with erysipelas of the head and face. As he had no power I could not bleed him, but, on the contrary, I gave him sulphate of quinine, and stopped the progress of the erysipelas by the nitrate of silver, making a margin round his scalp, and another round his neck, about an inch wide. This practice was introduced by Mr. Higginbottom, a surgeon of Nottingham. It is a very great improvement both in medicine and surgery; I say surgery, but my observations must here be confined to medicine. If nitrate of silver be rubbed around the part inflamed, it will, in the greater number of cases, stop the erysipelas. In erysipelas of the arm, I have applied it about half an inch in breadth, above and below the inflammation, and by this means quite stopped the progress of it. I have adopted the same plan in erysipelas of the body, making a margin around the body, both above and below the inflamed part. In this man's case the inflammation was checked in its progress down the neck, but in the upper part, I believe, it extended in one spot. I did not see it myself, but one of the gentlemen told me that it spread a little; therefore, in this case, I may say it prevented it from spreading. If rubbed upon the inflamed part, nitrate of silver is said to stop it, and I do not doubt that such is the case; but if rubbed round the margin of the inflammation, I can safely say, that it will produce this effect. Since so many die of this complaint in the hospitals, it is of the utmost importance to stop it quickly, and nitrate of silver will do it. Blisters will sometimes answer this purpose, although not always; but the nitrate of silver may generally be depended upon. This man's was a curious case, the disease having existed so many years before he sank. After death, I found effusion in the head, which I always find in those who die of erysipelas of the face and head. From irritation of the arachnoid there is great effusion of serum, more or less turbid, upon the surface of the brain, or in the ventricles, which are lined by the arachnoid, and sometimes it takes place in both together. In this man's case, it is very curious that we examined the brain carefully, cutting it slice by slice, yet we found no cause of the paralysis.

I examined a private patient a week ago, who died of hemiplegia, and found a small firm tumour in the head; the paralysis had come on suddenly, probably owing to a sudden effusion, and the fibrin had not been absorbed, but had become organized. In the present case nothing of this kind was found. There is, in most cases of this sort, something discovered after death, either effusion or an indurated tumour. Sometimes fibrin becomes organized, or part of the brain may be disor-

ganized; again—sometimes part of the brain becomes softened, so soft as to resemble pap. In this case nothing preternatural was found, although every part was carefully incised. In the plexus choroides there were two firmish substances: in one, very firm; less so in the other. These bodies were about the size of two large peas; but I cannot think that they could cause sufficient pressure to account for the symptoms. Possibly we were not sufficiently careful, and no examination of the spinal marrow was allowed; therefore I will not venture to say, that there were no other morbid appearances, or that the tumours did not produce the disease. In this case, I doubt if any thing could have done good.

The other, which proved fatal, was a case of chronic bronchitis. This man had been ill some months. The symptoms were swelling of the ankles, difficulty of breathing, great cough, and expectoration. He had also a firm, full, pulse; the respiration was heard all over the chest, and also the sonorous rattle, or a loud snoring sound. This man was a sailor, fifty-eight years of age, and had been ill for three months. His pulse was hard and intermitting; there was pain on pressure in the region of the heart, with palpitation; there was strong action of the left ventricle, but no preternatural sound. I had him cupped on the back two or three times, from which he found no benefit. I made his mouth tender by giving him only two grains of calomel three times a-day, which produced salivation in two days. His cough left him, the bronchitis became better, and the sonorous rattle decreased, when his mouth became very sore. After a time the mouth became better, and the bronchitis was entirely cured. On examination, after death, the lungs were found pretty healthy, so were the small bronchial tubes; but the mucous membrane of the larger bronchie was so much softened, as to be easily rubbed off with the finger. This was a case of severe bronchial inflammation subdued by mercury. It is common to find the mucous membrane of the stomach and small intestine thus softened. In the large bronchie, when there has been no sign of inflammation during life, there is sometimes found, after death, an abrasion of the mucous membrane. When the mucous membrane of the stomach and intestines become softened, the system sinks rapidly; and I have no doubt that this softening occurred in the bronchial tubes of this man. This is a curious disease, and has only of late attracted attention. It is sometimes combined with inflammation of the membrane; but sometimes it occurs without inflammation, or discoverable cause. I have frequently found parts become softened suddenly without inflammation, the surrounding parts being red, and often extreme paleness of the remainder of the mucous membrane of the stomach. I have known persons, tolerably well before, suddenly lose strength, obscure symptoms set in, and they have died suddenly. I have seen this soften-

ing take place in the liver. A lady of a bilious habit was suddenly seized with obscure symptoms referable to this organ, and in three days died. The whole of the liver was found in a softened state; the peritoneal coat was very soft, and appeared as if worm-eaten, and a reddish fluid was oozing through the openings, which was, in fact, the liver itself very much softened. I cannot believe that in this man's case the mucous membrane became soft more than a week before his death, at which time his pulse became feeble, and, I may say, much to my astonishment, he soon afterwards sank. The heart was found much hypertrophied.

If a part be not altered in structure, but merely becomes more healthy than natural, it is called *hypertrophy*. In this case, the calibre of the heart is reduced in size (*showing it*), constituting what is called *concentric hypertrophy*; when the walls of the ventricles become thickened, whilst its calibre remains natural, the disease is called *simple hypertrophy*; and if the walls are thickened, and the cavity dilated, it constitutes *eccentric hypertrophy*. In these affections there is more or less pain; the coronary arteries become enlarged in consequence of the heart's requiring a larger supply of blood. When hypertrophy occurs at any part, there is great activity, approaching to inflammation. In pregnant women, too, where something analogous to hypertrophy is going on, there is greater activity of the circulation, and the blood is found buffed and cupped. This disease is connected with inflammation. The vessels are larger, and carry more red particles, consequently the part is redder than natural. Now and then we find the part softened; in general it arises from an inflammatory affection. The right ventricle in this heart is but little changed. In nine cases out of ten the left side only is affected. Hypertrophy is a very common disease. This man's pulse was full and hard, and appeared as if there was a thickening of the coats of the artery, which I have no doubt was the case, since the aorta, and all these large vessels (*showing the heart and vessels*) were larger than natural. We continually find chronic bronchitis connected with diseased heart; one spreads to the other. Congestion of the lungs causes an accumulation in the right side of the heart, and the right auricle is found dilated after death.

There was a case discharged which I intended to have spoken to you of at my last lecture, but the time would not permit. There was violent action of the heart, which struck strongly against the ribs; the pulse was strong, firm, and sharp, and there was pain in the præcordial region. This affection is common in young girls and boys; is of an inflammatory character, and is unconnected with any affection of the lungs. In men it is usually combined with rheumatism, either subsequent to, or during an attack. The treatment is the same as that for chronic inflammation, viz.,

bleeding, low diet, &c. &c. The signs afforded by auscultation are not remarkable; the breathing becomes very short on moving about. The heart gives a strong stroke, raising the head of the auscultator at each pulsation; and if the case be severe, there is strong impulse at the sternum to a great extent. There is no preternatural sound, but merely great impulse. The extent over which the impulse is felt, of course depends upon the degree of enlargement, and over the extent a dull sound is given upon percussion. Although the chronic inflammation may not be extensive, still I keep the patient upon low diet, and take away blood. I have found that cupping, or applying leeches, over the region of the heart, is more beneficial than bleeding from the arm. If there is much pain, I give calomel, just to affect the mouth; purgatives should not be given, unless enough to keep the bowels open. Under this treatment, by applying leeches every other day, the impulse gradually got less. This boy\* was 16 years of age, and I perceive has been accustomed to carry heavy loads. If this disease does not arise from fever or rheumatism, it is generally caused by carrying heavy loads, or by walking or running quickly. His disease was decidedly of an inflammatory character, since it came on by shivering, succeeded by heat, acute pain in the region of the heart, and palpitations, and he had suffered three months with much dyspnoea and palpitations. I bled him to eight ounces, and applied leeches over the region of the heart every other day.

The next case that went out with diseased heart was of a more severe character, there being much thickening and dilatation. He was a young man, 20 years of age, an age at which inflammation of the heart most frequently occurs. There was extreme difficulty of breathing, so that he could not lie upon his left side, indeed upon either side, long together. The pulse was rapid, 120 in the minute; there was strong impulse of the heart, which communicated with the vessels of the neck, as if there was dilatation and thickening, with great addition of substance. The bellows sound is now heard when the blood finds a difficulty in passing from the heart into the aorta, or regurgitates into the heart. If the valves be so diseased that the whole of the blood returns, there is no bellows sound; it is when only part of the blood returns into the heart that the sound is heard. It is particularly necessary to observe, whether the sound occurs during the dilatation or contraction of the heart. This symptom is only relative, for it depends upon the difficulty which the blood finds in its egress from the heart. If the mouth of the aorta is diminished whilst the heart remains natural, the bellows sound is heard; and, on the other hand, if the heart is enlarged, whilst the orifice is of its natural size, it is heard

\* The report of this case will be found in the pages of this Journal, No. 39.—REP.

also; it occurs when the size of the heart is out of proportion with the vessels leading from it. This is often the case; and if you lessen the action of the heart, the bellows sound goes away, and this you can do by antiphlogistic treatment. This patient was cupped, and the heart, from acting with great rapidity, was reduced to the natural standard, and became nearly regular; the bellows sound, which he was troubled with, quite or nearly left him. He was not perfectly well, but yet so well that he would go out. It is however, probable, that the disease will return again, when he attempts to work, which he is obliged to do, for he has no other means of getting his living. By keeping down arterial action, and lessening the quantity of blood, he so far recovered, and is now able to lie down on either side; the action of the heart lessened, the impulse and bellows sound ceased. Now, diseased heart ought not to be considered as mere pathological curiosity, for many cases may be entirely cured, and a great many relieved.

Respecting the other patients, one with epilepsy, and one with hemiplegia, went out, without being cured, of their own accord, and also one with a horrid disease of the rectum, as she expressed it, "to die amongst her friends." A patient with consumption went out also for the same reason. There were three cases in which there was nothing the matter. A case of jaundice was also discharged. This is an affection which you will continually have to treat. It may be either acute, subacute, or chronic. The acute jaundice comes on suddenly, and is for the most part an inflammatory disease: inflammation of the liver will in most cases bring on jaundice, by producing a swelling and obstruction of the biliary duct. There are various shades of the disease: it sometimes is of a bright yellow, which may be considered the most favourable; sometimes it is of a greenish-yellow, and then is less favourable; when it is of a dark-green, it indicates a diseased liver, as Dr. Baillie has pointed out. This man, Robert Davidson, 34 years of age, of a bilious temperament, had been ill for some months, with pain in the epigastrium, weakness, and loss of power; there was also pain in the right hypochondrium and epigastrium, increased by pressure, clearly showing that there was inflammation; the stools were white; urine like porter, and he had a pricking sensation all over the body. This is a common sensation in jaundice. He was cupped to twenty ounces, and took five grains of calomel every night, and a dose of salts and senna every morning. The pain soon left him, and he expressed himself as being quite well, though the yellowness still continued. After removing the proximate cause of this disease, the jaundice still remains for some time, till the bile is removed which causes it. Hence this man said he was quite well, although the yellowness remained. After a few days, it gradually left him. Now observe this man did not see every

thing yellow, and only twice have I ever known this to occur. It is only when there is inflammation of the cornea, and much blood is sent there, containing bile, that this symptom occurs. A gentleman related to me the case of a person who could see objects yellow with one eye only, in which he saw nothing but yellow objects, and after death the humours of the eye were found to be of that colour. I do not know that this has ever been observed before.

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## REMINISCENCES

OF AN

### ARMY MEDICAL OFFICER.

PART I. CHAPTER III.

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It is matter of great satisfaction to the writer, that he can recall the embryo days of many professional men of great eminence and high respectability to his recollection. With some of these he formed a personal acquaintance; while of others he (at the time) had knowledge only by report, or of that sort which may be picked up among cotemporaries in a celebrated school.

In the former chapter, my elementary history was broken in upon by a digression; for transgressions of a similar nature the reader must be prepared, it being my design to commit not a few of them in the course of time.

But, with regard to cotemporaries, I beg permission to say, that I had the honour, for such I indubitably consider it, to have been nurtured with J. Gregory; Adam Black; Alison, now Professor of Mat. Med. in his native alma; Lizars, who requires none of my praise; Lyall, who has distinguished himself both as a medical and otherwise intelligent author; Oudney, who died like a hero, with his head upon the knees of the enterprising Clapperton, upon the burning sands of Africa, on the borders of which he had received the confidential appointment of Consul from the British government, for the express purpose of facilitating the penetration of unknown regions;

Copland, whom I have been proud to rank among my staunch and steadfast friends \*; and, I think, Tweedie, the judicious and indefatigable physician to one of the London charitable institutions, was, I believe, of my time, though not of my acquaintance. The late Dr. J. B. Davis, founder of the Royal Infirmary for Children in the Waterloo Road, graduated during the period of my residence, though he was my senior both in years and professional standing; having, indeed, ere this distinguished himself by his writings, both at home and abroad. Not a few gentlemen, who have, since these days, highly distinguished themselves by their valuable and talented exertions in the advancement of professional knowledge, resorted to Edinburgh from distant colonies, and from foreign countries: thus, we had the sons of English nabobs from the East, as well as aspirers after medical appointments in the Company's service; sons of coffee and sugar planters from the West Indies; men of North America in abundance; one large house full of wealthy Portuguese; and crowds from the Emerald Isle. There was not a single Frenchman, however, nor a German; there were a few Russians, or rather sons of Englishmen, employed in the Russian service; but unhappy England, and the whole world, being at the time by the ears together, the resort of what may be termed foreigners was reciprocally very limited, as much so, *mutatis mutandis*, as was that of British subjects to the continent of Europe.

The West India and Irish gentlemen somehow went to war about this period; and bloody work there was among them while hostilities lasted. What was the cause of this *status*

\* The eminent and learned author of the recently produced Dictionary arrived at Edinburgh at the same time as myself, but did not, till three or four years afterwards, commence the study of a profession, to which he has been, and will continue to be, so valuable a contributor, having devoted the intervening period to the cultivation of the arts, sciences, literature, and philosophy, for a competent knowledge of which he is justly distinguished.

*bellicosus*, if I ever knew, I have forgotten; but I had the fortune (good or bad) to hear a great deal of what both parties had to say, being myself *in statu neutro*. None of the Englishmen, and very few of any other nation, concerned themselves in the merits or management of the grievance. Fighting in the streets and upon the public promenades with fists and cudgels, and at dinner tables with chairs and bottles, terminated at length in the more serious warfare of pens, ink, paper, pamphlets, and PISTOLS!! Yea, verily, the morning subsequent to the creation of a batch of doctors, half a dozen gentlemen crossed the Frith of Forth, and amused themselves by firing at and wounding one another. I was passing through that well-known place of resort called The Meadows, one summer evening, when a regiment of volunteers was marching from their drill-ground; the Montagues and the Capulets met. An Irish candidate for the *summi honores* roared from the centre of his partizans, upon seeing a brother candidate bearing something of a swarthy aspect, "There goes my Thesis!"—he having written his *tentamen inaugurale DE RACHITIDE*, and the name of the other being Ricketts. This was war-whoop enough; and Donnybrook fair only could furnish a realization of the scene which immediately took place. Even the gallant soldiers of Parliament-house square could not continue their march on account of the contested affair which was going on in their front.

During the second winter, I attended Dr. Home's lectures on materia medica, Dr. Gregory's practice of physic, Mr. Murray's chemistry, Dr. Barclay's anatomy, the practice and the clinical lectures at the Royal Infirmary, it being considered that my mind was by this time strengthened sufficiently to enable me to take a wider range than had been thought advisable the year before.

This winter I booked Dr. Gregory's admirable, though unfinished, course; and have preserved it in six closely-written volumes. I have never met



with any thing upon medical subjects of so interesting a nature, or of such valuable practical use; nor have I been able to find that (with the exception, perhaps, of some more recent discoveries) he left out much of what it is requisite to know. Often have I been agreeably surprised at finding, on turning over the leaves of these books, that Gregory had told his pupils (and myself among the rest) what many more voluminous, though less felicitous, authors seem to have been at considerable pains to become possessed of. To describe the spirit, the taste, the composition, much less the matter, of these prelections being a task far beyond my ability. I shall endeavour to amuse the reader, but more particularly to convey a useful hint to the student, by attempting an infinitely humbler one; namely, by describing the plan by which I contrived to preserve these lectures for subsequent reference.

Although, during the same season I attended several courses of lectures, I committed one only of these to book; and, acting under the direction of excellent counsel, I wrote very scanty if any notes of *demonstrative* lectures—such as those upon chemistry, anatomy, and operative surgery. The sense of sight, at least, as well as that of hearing, was then in request, for purely didactic instruction, that is to say, for the mere reception thereof, hearing was the only channel of perception on the part of the sensorium in immediate request. I was not a stenographer, but wrote rapidly, in a way practised by many of the best parliamentary reporters, wrote short, *i. e.* abbreviated both words and sentences, condensed elucidations, and even abridged upon the spot. I made it an inviolable rule to transcribe fairly, and at greater length, the lecture thus taken from the mouth of the professor in the class-room, every evening (or in the course of the current day) before I went to bed. This occupation filled up my time both profitably and agreeably. Generally I had the interval of an hour after

attending the lecture thus carried off, and my resort to the next; and this hour was in general diligently employed in extending my notes, upon uniform paper, so as to make the binding up, at the close of the course, a very simple matter.

This is the plan I would recommend, after my own experience, to students who propose to be note-takers. Let them take as copious abstracts of what may be said by their teachers as possible; transfer to fair paper, and in as legible a hand as they can write, the whole while it is yet fresh in their memories; even a night's rest upon this is hazardous to accuracy, and an evening's dissipation, even if of so innocent a nature as to be worthy to be designed relaxation only, is next to fatal. It is very likely to double the work of the ensuing day, to fatigue, and to disgust the youth in his ardent pursuit. Habits of authorship (habits which comprehend whatever constitutes the highest excellence of a learned character) are thereby early formed, indelibly fixed, and rendered matters of mere common-place. The possessor of such monuments of early industry will look upon them until the latest hour of life with an indescribable satisfaction; he deposits them among the heir-looms of his family, furnishes his sons (or other followers in his own path) with them when they enter upon the career of medical study; or bequeaths them as an invaluable legacy to some industrious youth, who may bid fair, in his opinion, to appreciate their value.

A coincidence, (not, perhaps, very remarkable, but one) which I cannot forget, occurred in the course of my attendance upon Dr. Gregory, which, (being in a conversational mood) I shall cursorily relate, *sans apologie*.

I had made up my mind, and the directors of my education had sanctioned the scheme, of re-attending the truly philosophical lectures delivered by the professor of materia medica, therapeutics, and pharmacy, the following winter. As they were deliver-

ed at too early an hour for me to present myself with necessary regularity, labouring at the time under a formidable diarrhœa, which debilitated me much, and was particularly severe during the night, as well as the early part of the day, I continued, nevertheless, to reach Dr. Gregory's classroom in time to obtain a seat in the front row, just under the professor's desk; and there were two friends who flanked me, one on either side, in order to insure for me as much space as possible, and to whisper a word now and then for which I might perhaps be at a loss.

One morning, after having been disturbed by my malady upwards of thirty times, I continued to find my way to the college (which was at no great distance from my residence), and to take my seat in the accustomed place in good time, having abandoned, as I have already stated, the idea of attending upon the eight o'clock lecture until the next session, although I had taken my ticket. There, before the arrival of the professor, I was seized with syncope, and my friends removed me to the open air. I found myself so extenuated that I resolved to go home; and, much as I had set my heart upon completing my MS. copy of these inestimable instructions, to trust to a future session for the supply of the *hiatus*, which this necessitous occurrence seemed destined inevitably to cause. On my way along the street, however, I rallied, returned, was in time, and wrote the lecture as usual.

Dr. Gregory had a sound regard for the contract entered into on the part of a teacher with his pupils. In consequence of this he considered the duties of the chair to hold claims upon his attendance paramount to all others. He, therefore, steadfastly refused all visits to patients, however profitable, which might interfere with his business at the University. As strictly adhering to this principle, as it was possible for a man of such eminence and in such request to do, he, in almost every instance, refused to attend

patients at a distance during the session of college; sometimes, though rarely, however, he had it not in his power to decline, and I think about twice, in the course of my attendance, he was called into the country. One morning I found myself so ill that I was absolutely unable to attend the lecture, and accordingly remained at home. This was on a Saturday, and the more vexations because the course of lectures was drawing to a close, and my MSS. were near completion, without having been interrupted by attacks of sickness, strong as these had been. I spent a doleful couple of days lamenting, with all the bitterness of heart consequent to a juvenile disappointment, the sad blank which would now infallibly be left among my leaves; but remedy there was none: and on the Monday I repaired to the lecture-room, fortified with all possible resignation. Having taken my usual seat, and my ordinary associates being seated by me, I began to deplore my misfortune. "What misfortune?" was the reply. "Why, that of not having taken Saturday's lecture." "Saturday's lecture! There was none." "You don't say so!" "Yes, we do. Dr. Gregory was obliged to go to the country, and so you are just in time." This was the most agreeable piece of intelligence I had ever received, and I drove the quill with accelerated rapidity.

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#### PLAGUE AT BUSHIR.

THE accounts of the ravages of the plague at Bushir, in the Persian Gulf, are frightful. The mortality is so great, that robbers pillage the town with impunity. At Constantinople the disease is also making ravages. In this last city the cholera has not caused such mortality as in other places.

THE cholera has made its appearance, we believe for the first time, at Hesse-Cassel.

THE

**London Medical & Surgical Journal.***Saturday, November 10, 1832.*

## ABUSES IN THE MEDICAL PROFESSION.

IN our last we noticed a few of the numerous abuses in the medical profession of this country, and we called upon the public press to aid us in correcting them. If these abuses were exaggerated, or if they were not highly injurious to the greatest interests of society, the preservation of public and of personal health, we should not have called on that mighty engine, the press, to co-operate with us in promoting the welfare of humanity and the beneficence of the healing art. Though we are the feeble but honest advocates of humanity and medical science, yet our cause is that of every man in society, from the king to the peasant. It has often surprised us that the profession of medicine is totally overlooked by the public press. All the other sciences, arts, and pursuits of mankind are attended to, and that which is dearest to every one is neglected. If the practice of medicine be the most abstruse, delightful, and extensive study that can occupy human attention, and the most important to man—for what is man without health?—it assuredly ought to be patronized and protected. If it consisted in the application of a few certain remedies, and did not comprise almost all the branches of natural science, besides those called medical, then it might be practised

with safety by every person of ordinary comprehension. But those conversant with it declare its empire boundless, and that the study of one of its elementary branches occupies the lifetime of the ablest men before they can have a perfect knowledge of it. When we consider the wise co-ordination, the concatenation, and respective relations of the numerous organs in the human body, to which is confided the mysterious exercise of life, we find nothing defective, nothing superfluous, all constructed with consummate perfection. But when we study the actions or functions of these organs, such as the circulation of the blood, sensation, digestion, respiration, vision, audition, olfaction, gustation, &c., and the intimate connexion between the immaterial and material principles in the living body, we feel the mind elevated to the sublime Author of man. When we consider the innumerable derangements of the human frame, induced by surrounding bodies, and the innumerable remedies bounteously afforded for their alleviation and removal, we must at once conclude that the pretensions of unprincipled and uninitiated persons to the healing art are unfounded, and their practice must be rash, injurious, and often fatal. Nevertheless, any one may style himself doctor, surgeon, accoucheur, and practise medicine. The colleges have no power to prevent this. The College of Physicians can fine, provided the offender has practised one entire month in London; but how can this be proved? The College of Surgeons

are a mere corporation, and have no power whatever. The Apothecaries have power, which they exert tyrannically against medical students; while they allow chemists, who are not medical men, to escape.

The Practice of Midwifery is attempted by the most illiterate of both sexes; and the human female, when stretched upon the rack on which nature has laid her, is deprived of that efficient aid that could abridge her severe sufferings, and extricate her infant from danger, and even death.

If we contrast these abuses with the state of medical practice in France, we shall be gratified by observing that no person can undertake the treatment of the sick, even during parturition, without having acquired a proper medical education; for, be it observed, that midwives, in any part of France, must be properly instructed. In this country, the most ignorant persons undertake the duties of midwives; and hence the frightful mortality among lying-in women and their helpless offspring. The public has, at length, seen this error, and accordingly endeavour to abate it, by employing medical practitioners to superintend the extraordinary and difficult process of parturition. Some few, whose notions are antiquated and erroneous, consider the human female requires no medical aid during the nativity of the offspring; but no one who is aware of the numerous difficulties and dangers attendant on parturition can sanction such an opinion. It is, however, an extraordinary fact, that neither the College of Physicians nor

the College of Surgeons examine on obstetric medicine; and therefore students in general pay little attention to the subject. The Corporation of Physicians cannot defile themselves by manual operations: they leave those to the mechanical branch of the profession, called "Surgeons;" while these have a by-law, to the intent that none of their body, who practises midwifery or pharmacy, can be on the Council or the Court of Examiners; and, consequently, those who do not practise midwifery could not, with propriety or consistency, examine upon it. Thus it is that this branch of medicine is a *terra incognita*—"a no man's land," to which every person may lay claim. In support of this position we may state, that in London, as well as in the country, the lowest of both sexes act as obstetricians,—bone-setters, cow-leeches, chemists, and women. There is scarcely a commission or an assizes that passes without some trial for mala praxis in obstetrics. But we cannot be surprised at this, when the Colleges and Hall turn their backs upon the subject; and when a president of one of these valued and esteemed institutions publishes a series of letters in the newspapers, against the employment of medical practitioners as obstetricians. This sage personage would have hospital surgeons employed in difficult cases, those individuals who cannot practise obstetrics, and who would be as competent to manage difficult cases as so many new-born infants.

Posterity cannot believe that me-

dicine could be in such a deplorable state of degradation in the nineteenth century ; with our schoolmasters abroad, marches of intellect, omnipotence of the public press, spirit of philanthropy, and unbounded wisdom.

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#### NON-CONTAGIOUSNESS OF CHOLERA.

WE are glad to perceive, that the opponents to cholera contagionists increase every day, and are to be found in every corner of the kingdom, while the Central Board of Health party are consigned to oblivion. We have been favoured with the report of a meeting, held a few days ago at Dumfries ; and we shall be obliged to our valued correspondent if he address us personally in future, as some of our communications find their way elsewhere.

“ At a numerously attended public meeting of the Medical Gentlemen of Dumfries, held in the Council Chamber, on Thursday, the 18th October, 1832, Archibald Blacklock, Esq., Surgeon, in the Chair.—It was moved by Dr. Ross Jameson, seconded by Mr. C. Bell, Surgeon, and carried by a majority of 11 to 1:—

“ That it is the imperative duty of the medical men, both resident and non-resident, who have been engaged in the treatment of the malignant or Asiatic cholera, since it appeared in Dumfries, to declare to the public, that the rise and progress of the pestilence here, in their opinion, were quite independent of, and unconnected with, human contagion or infection ; and, further, that, from what they have observed, they do not consider it capable of being conveyed from one individual to another.”

#### REMARKABLE EXPLOSION OF CHOLERA IN ONE NIGHT.

WE recollect how the hunters after contagion in cholera slurred over the remarkable manner in which the cholera burst forth in one night at Gateshead last year. The *Gazette Medicale* of the 23d ult. furnishes another remarkable instance of the kind, which occurred at Zneim, in Moravia, during the night of the 9th of August last, when 400 cases occurred in a population of three thousand.

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#### RE-APPEARANCE OF CHOLERA IN BERLIN.

WE regret to state that, in the above city, four cholera hospitals have been re-opened. Latterly, from 15 to 20 deaths have taken place there daily.

At Cassel, where the disease had begun to decline, it has lately assumed new vigor, and has appeared among the military.

At Liege, the appearance of the disease has been officially announced.

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#### AN ACID RIVER.

AT the Academy of Sciences a paper was read, on the 22d ultimo, from M. Boussingault, relative to the chemical properties of water taken from *Rio-Vinagre* (Vinegar River), or *Rio de Posambrio*, situated near Popayan, in South America. This river, which takes its rise in the midst of a chain of very high mountains, proceeds in a subterranean course for several miles, and debouches in a magnificent cascade of 300 feet high. Below this point its banks are with difficulty approached, and persons cannot remain long near it, in consequence of the watery particles which are suspended in the atmosphere causing great irritation in their eyes. The analysis has produced

Sulphuric Acid . . . . .	0.00110
Hydrochloric Acid . . . . .	0.00091
Alum . . . . .	0.00040
Lime . . . . .	0.00013
Soda . . . . .	0.00012
Silica . . . . .	0.00023
Oxide of Iron and Magnesia . . . . .	traces.

## Hospital Reports.

## ST. THOMAS'S HOSPITAL.

## CHRONIC GASTRITIS.

ANNE HOLMES, aged 26, a servant, of robust habit, was admitted into the Hospital, September 20, under Dr. Elliotson. States that she has been ill for nine months. Has pain in the epigastrium, increased by pressure or deep inspiration; the pain, on going up stairs, is more acute, and extends to the back; feels also a sensation of heat about the stomach, extending half up the œsophagus, greatly increased by taking any thing into the stomach. Every thing she swallows feels very hot; has also a sensation of nausea, which is increased by food; complains of a very disagreeable taste in mouth; bowels confined; pulse rather sharp, 76; tongue rather white, but red at tip; countenance very anxious; cannot lie upon either side; catamenia regular.

22. *V. S. ad lb. j. hirudines xx. epigastrio. Slops.*

28. Continues much the same; bowels not open for two days.

*Hæbeat.—Ol. ricini, ʒss. pro re nata. Hirudines xx. epigastrio quotidie.*

Oct. 2. Pain in epigastrium a little better; other symptoms remain the same. Bowels kept regular by castor oil.

5. Pain in epigastrium increased since last report; all the symptoms appear worse.

*Ol. croton, ʒj. utend. ut liniment. epigastrio et pectori.*

7. All the symptoms relieved. The croton oil has brought out a thick eruption on the part it was rubbed; countenance improved.

9. Has continued to improve since the croton oil has been used. The pain in her epigastrium increased if she moves about; can now lie upon either side; pulse small, rather quick, 80.

*Rep. ol. croton ut liniment epigastrio et pectori.*

10. The croton oil has produced another eruption, much thicker than the former. Symptoms remain the same as yesterday.

12. Much better.—Pergat.

15. Sensation of heat about the stomach and throat nearly left her. Still, occasionally, has the shooting pains in chest; countenance improved; tongue nearly natural; bowels regular; pulse quick, and rather feeble. The eruption, produced by the croton oil, nearly well.

18. Heat about the stomach and œsophagus entirely left her; disagreeable taste in mouth gone. From the least exertion she occasionally experiences pain in the side. Appetite good; countenance improved; bowels regular; pulse natural.

*Omitt. hirudines.*

20. This morning she was taken with hysterical symptoms; the whole anterior surface of her body giving severe pain from the slightest pressure; great depression of spirits; loss of appetite; pulse languid, 70.

21. All the latter symptoms left her. This morning she appears pretty well.

23. Feels perfectly well; bowels regular; tongue natural; appetite good. Left the Hospital quite well on the 25th.

## EPILEPSIA A TERRORRE.

John Easterbrook, aged 21, of short stature and phlegmatic temperament, a rope-maker. Admitted into Jacob's Ward of this Hospital, under the care of Dr. Elliotson, for fits produced by fright. States that he was in a shed boiling tar, which in a moment boiled over; the fume arising from it was so great, that before he could reach the door was nearly suffocated. The next day was taken with severe pain in the head, soon followed by violent delirium, which lasted for three days. The remedies resorted to for the delirium so much weakened him, that he could scarcely

walk about for eight days. Two months after this he was first taken in a fit, when he bit his tongue, and foamed much at the mouth. This was followed by cold shivers and loss of power, which continued the day. Since that time the fits have gradually increased; at present they come on twice or thrice a-day, always succeeded by the cold shivers and loss of power: has also, at the present time, constant pain on the top of his head. Appetite pretty good; bowels confined; tongue tremulous, and rather white; pulse very quick, and feeble.

5. Cold shower-bath daily.

*Habeat.*—*Mist. sennæ comp.* ℥iiss. *quotidie si opus sit.* *C. cruent. ad* ℥xij. *occipiti.*

8. Has not had a fit since his admission; complains of a throbbing pain in the back part of his head, and also of pains in all his limbs. This morning he states that he has got a gonorrhœal discharge, which he has had for these last three months.

*Pergat in usu medicamentorum.*

10. The pain in his head has entirely left him, other symptoms continue the same.—*Pergat.*

12. He was taken with a very severe fit last night, which lasted nearly twenty minutes, succeeded by cold shivers and excessive prostration. Complains this morning of pain in his head.

*C. C. ad* ℥xij. *occipiti.*

15. Pain in his head much relieved from the cupping. This morning he complains of pains in all his limbs, accompanied with stiffness. Tongue clean; bowels kept open by house medicine; pulse regular, 80.

16. Pains in his limbs continue the same, when warm he finds them better; great thirst; tongue coated with yellowish fur; no appetite; pulse quick, compressible; bowels rather relaxed; pain in head entirely left him.

*V. S. ad* lb. j. *vin. cochl.* ℥ss. *ter die.*

18. Has been much easier since the bleeding. The pains have nearly disappeared, but the stiffness remains so

bad, that he can scarcely turn himself in bed. The colchicum has purged him a good deal, in consequence of which it has been discontinued since last evening. Pulse rather sharp, 96; thirst continues. Has not taken any food for two days.

20. Yesterday he recommenced the colchicum: it has opened his bowels two or three times. The pains have entirely left him; stiffness nearly subsided. Has not had another fit, neither has he been troubled with any pain in his head; still, however, his countenance appears dull; pulse nearly natural; tongue clean; appetite better.

21. Much better; has been able to get up; stiffness entirely left him. This evening he was requested to go to the bath, he said positively he would not, for he would leave the hospital, and went out accordingly.

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#### GUY'S HOSPITAL.

##### *Injury of the Head—Paralysis— Loss of Vision—Laryngitis— Piece of Tobacco-pipe in the Brain.*

JOSHUA COOPER, ætat. 58, a strong, healthy, very muscular man, was admitted into Guy's Hospital, under the care of Mr. Morgan, on the 29th of August, with great pain on the right side of the head; partial paralysis on the other side of the face and neck—but this occurred at intervals only; falling of the upper eyelid of the right eye, and he had been gradually losing the sight of it; the pupil rather dilated, cannot distinguish anything with this eye; complains of great pain in the right eye and side of the face on going near the fire. He imputes these symptoms to a fall from a cart, which he received about a year ago; but he since hurt his eye in a drunken brawl. Before his admittance into the hospital, he had been attending at the Stoke Newington Dispensary, on the 11th of May; he was bled and leeches; cold lotions to the head; saline purgatives, and gr. v. calomel every night;

under which treatment, he says, he got quite well. On the 19th of June, the pain in the forehead and right eye returned, with intolerance of light. He was then bled; took the calomel as before, with purgative mixtures, as occasion required. He soon got so much better that he was induced to give up his letter on the 30th of the same month. He came to the Hospital (complaining as above) on the 29th of August, when Mr. Morgan ordered c. c. ad ̄xvj. emp. lyttæ. nuchæ. pil. hyd. gr. v. or with the mist. mag. c. mag. sulph. ter in die. He went on till 12th of Sept. without any difference in his symptoms, when he had again c. c. ad ̄xvj. dext. temp. the right side of the head was shaved and blistered; he was slightly benefited. 22nd. V. S. ad ̄xij which was cupped and buffed. On the 29th, he was bled to ̄vij. Under this treatment he was gradually getting better till the 4th of October, when he suddenly died, as was supposed, from croup.

*Autopsy.*—No appearance of injury or inflammation of the right eye; the lungs, heart, liver, kidneys, and pancreas were in a very healthy state. On removing the larynx, a puriform mucus followed the knife; there was inflammation beneath the mucous membrane, with great thickening, with acute laryngitis. On minute inspection, there were observed marks of old disease, probably of the like character. The parts were distended with œdema, and a few patches, or flakes of lymph were scattered on the surface, but no bridles or bands, and nothing like the commencement of a false membrane. The brain tolerably healthy; the vessels of the dura mater were slightly turgid; the other membranes healthy; some marbling of the substance; rather more fluid than natural in the ventricles. On removing the brain, there was found a piece of tobacco-pipe, about two inches in length, lodged between the bone and the dura mater, near the optic foramen; the dura mater was not lacerated; but at the spot where it had

been pressed upon by the pipe there was a small tumour, resembling the commencement of fungoid disease; beneath the membrane, opposite the tumour, was a small mass of dark-gray matter, probably coagulum; rather more fluid than natural at the base of the brain; no cicatrix to indicate any wound about the eye. He never stated that any foreign body had been driven through his eye; but said he had been hurt when he was drunk.

EXCISION OF THE MAMMA—AMPUTATION OF THE LEG.

Tuesday, Nov. 5th, Mr. Bransby Cooper removed the left breast for a woman, named Maria Hogan, ætat. 46, No. 29, Martha's Ward. She came into the Hospital on the 17th of October, and states, that for the last eight months she has experienced great pain in her left breast, shooting up the neck into the axilla and down the left arm. She has had a small tumour in her breast for some time; it is of a marbly-hardness, painful when handled. She has been a very healthy woman, of regular habits, has worked hard, had three children, but never suckled with that breast, on account of the nipple being retracted ever since childhood. The breast was removed in the usual way, with some fibres of the pectoral muscle, to which the tumour adhered. She was then put to bed, with a piece of dry lint over the wound, and left to granulate, Mr. Cooper and Mr. Callaway having found, that when so treated the disease is much longer before it returns.

28 Had a good night; bowels open; is doing well.

29. The edges were slightly drawn together with strapping; is looking healthy, and is rapidly healing.

Tuesday, October 30. W. Pearson, 25, Luke's Ward, had his left leg removed, on account of a chronic inflammation of the knee-joint. He is 25 years of age; is a hatter by trade; worked hard; drank considerably, from a gallon to two gallons of porter



daily. About three years ago he was jumping from a height, and he sprained his knee; it gradually swelled, but he took no notice of it; it was leeches, poulticed, blistered, &c., without any benefit. He could work for a day or two after applying leeches and resting; but on again going to work, the inflammation returned worse than before. Mr. Cooper operated with the double flap, cutting the outer flap shorter than the inner. The arteries were all enlarged, on account of the disease in the joint. The leg was then dressed and the man put to bed. We never saw an amputation better performed.

31. He took last night liq. opii sed. gtt. xxv., but did only sleep at intervals; stump easy; tongue clean; bowels open; pulse good.

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ST. GEORGE'S HOSPITAL.

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*Osteo-Sarcoma.—Amputation above the Knee.—Hydrocele.—Excision of Polypus Uteri.—Hydrocele.*

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October 25.

OSTEO-SARCOMA—AMPUTATION.

MR. KEATE amputated the leg of a patient above the knee for an osteo-sarcomatous tumour of the leg, situated under the soleus and gastrocnemii muscles. The patient was admitted about a fortnight since, and Mr. Keate, whose patient she was, requested the opinion of Mr. Brodie upon the case, as it seemed of rather an obscure nature. Mr. Brodie saw her a few days after her admission (she had been formerly under his care as an out-patient, and then Mr. Brodie had ordered her to rest it, without giving any further decided opinion upon the matter), and, after examining it, he declared his opinion to coincide with Mr. Keate's, as to its being of a malignant nature. Mr. Brodie added, that he only remembered one case of the same nature in the hospital, and that was in a boy, who had a tumour somewhat similar under

the muscles of the ball of the thumb, which, Mr. Brodie added, was extirpated. The nature of the tumour being thus declared to be malignant, the patient was acquainted with the result, and she readily consented to undergo any operation that might be judged necessary for her relief. Previous to operating upon her, the surgeons consulted together, and determined upon opening the tumour, and if found to be malignant, the leg was then to be amputated above the knee. Upon cutting into the tumour, some fluid gushed out, and Mr. Keate, perceiving his diagnosis of the case to be a correct one, immediately amputated the leg above the knee. After the operation was concluded, Mr. Keate examined the tumour; he remarked, "that the tumour had been increasing in growth for the last eighteen months. When it was first perceived, it was much smaller in size, and the patient felt great pain in the sole of the foot, so much so as to prevent her from going about her usual occupation. For the last three months, the increase of it in size had been more rapid." When cut into, it was found to be of an osteo-sarcomatous nature; it was very firmly intermixed and imbedded in the muscles, and ran so high up to the knee-joint, as entirely to have prevented the limb being amputated below the knee. The woman bore the operation with remarkable courage and fortitude. Her health is very good, and there is every chance of her speedy recovery.

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The next operations performed were the cutting out a fatty tumour from the back, which calls for no remark, and the tapping a hydrocele, by Mr. Hawkins. In the latter case, owing to some unforeseen circumstance, the fluid did not flow through the cannula, but only a few drops of blood. This unforeseen failure arose clearly from no want of skill or dexterity on the part of the operator.

A few portions of dead bone were then taken from a case of necrosis of the tibia, by Mr. Babington.

Oct. 26.—To-day, Mr. Brodie cut off a polypus of the uterus, in a patient of Dr. Hewett's. Lisfranc's forceps were used to draw it down into the vagina, and the neck of the tumour was then divided with a sharp-pointed bistoury. The size of the polypus was that of a small orange, and, in its structure, it resembled what was formerly known in surgery by the name of fleshy tubercle of the uterus. No hæmorrhage occurred.

*Continuation of Shaughnessey's Case.*

HYDROCELE.

Oct. 14. Some degree of constitutional disturbance; bowels much relaxed, accompanied with great intestinal pain, for which he was ordered a dose of magnesia and rhubarb. Mr. Brodie also ordered him to take calomel and opium at night, and to continue it, not, remarked he, that the man appears particularly to require it now, but he may perhaps eventually do so; and, by giving it him now, therefore, we save ourselves time, and him much after pain and suffering.

19. Going on very well.

22. Continue medicine.

28. Quite well. To leave off his medicine, and to go out on Wednesday.

APPEARANCE AND PROGRESS OF  
CHOLERA IN THE NEW BAILEY  
PRISON, MANCHESTER.

BY HENRY OLLIER, ESQ.,

*Surgeon to the Prison.*

IN drawing the attention of your readers to the all-absorbing subject of cholera, it is not by any means my intention to trespass upon your columns by entering the arena of discussion—as to whether the present epidemic is, or is not, contagious;—as to the best curative measures for its extinction;—or as to its first appearance and progress in this island. The daily journals are so full of arguments, that the subject is threadbare; but, unfortunately, in spite of “stubborn facts,” and the “thousand and one” cures that have been so boldly advo-

cated in divers quarters, the pestilence still prevails, and still seems to deride all the best efforts of science towards the invention of a cure.

In spite of the exertions of Boards of Health, of medical officers, and officers of quarantine, the disease creeps along, making its “exits and its entrances” in a way not to be explained by analogical reasoning, and (what is of infinitely more consequence) baffling every attempt either to arrest its progress, or to subdue it after its appearance.

Our brethren out of the profession have done their duty as far as in them lay the power; for if they have not “stayed the plague,” by the adoption of preventive measures, they have wisely contributed to the general comforts of the poor, and ameliorated the condition of those who were most exposed to its influence, either through the medium of vice or poverty. Let us then perform *our* duty;—let us look at the subject with the eye of philosophy,—not through the mist of prejudice, but through the enlightened medium of science; and then we may with reason hope to see, ere long, that full and impartial evidence may elicit the decision of truth. It is for the promotion of this object that I venture to appear before the public.

When the epidemic cholera made its appearance in Manchester, it became my duty, as surgeon to the New Bailey Prison, to confer with the visiting justices, as to the best measures which we could adopt, in order to prevent its ingress to the jail; and all due precautions were immediately taken for that desirable purpose.

Each prisoner was subjected, on his admission, to all the available rules of medical police;—such as ablution, frequent inspection, change of clothing, and quarantine of at least five days, before he was classed with his fellow-prisoners. A disinfecting apparatus was erected—such as our eminent townsman, Dr. Henry, has advocated in a published tract. In this apparatus the clothes of the prisoner were immediately subjected, by the

agency of steam, for at least one hour, to a dry temperature of at least 208°, a process which not only destroys vermin, but disinfects the materials, by decomposing and evaporating any contagious virus that they may contain.

On Friday, the 7th of September, however, in derision of this preventive service, the disease made its appearance. At seven o'clock in the morning I was sent for, and found a misdemeanour prisoner labouring under all the characteristic symptoms of the epidemic cholera, of which he died in three days. He had been in the jail three weeks, had passed through quarantine, and been afterwards daily subjected to hard labour. He had been troubled with severe diarrhœa for several days, but did not report himself sick. He had not communicated with his friends, even by letter; and when he was admitted, there was not, among 520 prisoners, one medical case of any kind under treatment in the men's hospital! The jail was remarkably healthy.

At seven o'clock on the following morning, a convict prisoner, in so insulated a building of the prison, that he could not have even seen the other man, was suddenly attacked by the symptoms, and recovered.

On Saturday, the 8th, divine service was suspended.

On the 12th, diarrhœa, of different degrees of violence, prevailed throughout the jail, and three prisoners, confined in different parts, were admitted into hospital with genuine cholera. On the 14th, and almost every following day, there were malignant cases; and diarrhœa was now so prevalent, that, at my request, the treadmill labour was also suspended, and the diet of the prisoners, which had been ameliorated several months since, by way of anticipation, was still further improved in quality.

In the mean time, at the suggestion of our magistrates, who are always anxious to deal out mercy as well as punishment, I had great pleasure in selecting the professional assistance of my friend and relative, Mr. Stott,

in order that every attention might be paid, both by day and night.

Five weeks had now elapsed since cholera became our unwelcome visitor. It had left the male prisoners, and for four weeks the female side of the prison was exempt from its influence.

On Sunday, the 7th inst., however, a convict woman, who, with a child at the breast, had been in prison for three months, and had held no intercourse whatever with the male prisoners, nor with the females, lately discharged from the quarantine ward, was, after diarrhœa of several days' continuance, attacked with the genuine symptoms. Her life was in jeopardy for two days, but she recovered.

On the 12th, up to the 18th inst., when the disease again disappeared, other females of *separate* classes were attacked, all of whom had been in the prison for *at least four weeks*, and, of seventeen, two have died.

During this visitation of six weeks, then, there have been sixty-five cases, nineteen deaths, and forty-six recoveries; and I can safely assert, that more than fifty attacks of the premonitory diarrhœa and nausea have been cut short in a temporary infirmary, which was furnished for the purpose, near the hospital of the jail.

If there be any reason to boast of this success among prisoners of weak constitution, who were consequently predisposed to the disease, it is very reasonable to suppose that the treatment will be considered matter of importance.

As soon as a prisoner reported himself as having diarrhœa, he was immediately removed to a bed in the temporary infirmary, where an assistant administered, every second hour, a pill, consisting of 2½ gr. of calomel, 1½ gr. of James's powder, and gr. ss. of opium; which was followed by the exhibition of castor oil, according to circumstances. If the diarrhœa was severe, and accompanied with nausea or vomiting, a solution of tartarized antimony was given, and repeated until full and free vomiting was produced. If (as was too frequently the

case, from his own neglect) the prisoner was admitted into the hospital labouring under the characteristic symptoms of the disease, the antimonial solution was exhibited, according to the views of Dr. Reisch of Berlin. A large mustard cataplasm was applied to the whole belly, until he cried out for its removal; and as much cold water was given as the patient could drink, a privilege which he most heartily enjoyed. If the collapse was complete, so that vomiting was with difficulty excited, a large table-spoonful of mustard seldom failed to produce a commencement of the desired effect, namely, such a copious and forcible expulsion of the stomach's contents,—such a powerful succussion of the whole muscular apparatus of the chest, that its reservoirs of stagnant blood were, to a degree, emptied, the heart's action was increased, and the circulation gradually equalized throughout the body. After this forcibly expulsive vomiting had been produced, the solution was gradually discontinued, until the evacuation assumed a bilious character; and then, in addition to diet, moderate doses of chloride of soda were given, as a gentle stimulus to the stomach, as well as to the liver.

The first three cases that occurred were treated by stimulants, without effect; and I am clearly of opinion, that opium, brandy, and ammonia, must either fail to cure, or induce consecutive fever of a fatal kind.

As to croton oil, I administered eight drops of it in twelve hours without any effect whatever. As to the saline treatment, I hear that it has generally failed. With regard to calomel, I conceive that it can only be useful in the premonitory stage. If it be given in the condition of collapse, it must be given in immense doses; and even then, either the intestinal canal does not absorb it, and death ensues, or, if it be in part carried into the system (who can calculate the quantity?), the liver is so irritated, as I have seen in several instances, that vomiting of a grass-green bilious

fluid supervenes, which defies all our attempts to subdue.

As to saline injections into the vascular system, physiology is totally at variance with the experiment.

To conclude:—It is evident that the idea of a specific remedy for cholera is as absurd as it is lamentable. What, then, is it our duty to do?—What, indeed, can we do, but act upon the reasoning of medical principles?

Of this I am sure, that whether the antimonial treatment, according to the rules above mentioned, be approved of or not, I have had the enviable pleasure of being a witness to its effects, at the bed-sides of prisoners, who, after a pulseless, hopeless state of suspended animation continuing for many hours, have been restored to life without the dread of consecutive fever.

Into the question of contagion, it is not my intention to enter; but I cannot convince myself, by observation, that the disease was introduced by personal agency, either in its attacks on the male or the female prisoners.

If, after making its appearance sporadically, this vagrant and fickle malady is afterwards communicated to others, it is my humble but firm opinion, that it selects only such as are eminently predisposed. What medical practitioner will not feelingly admit, that it is an unprofitable patient?

Our duty, however, is like that of the good Samaritan: we are servants in a good cause. If this hasty communication has a tendency to produce throughout the kingdom, all evidence bearing upon the subject, from those who have witnessed the disease, my object will be accomplished. Let our motto be

“ ———— Si quid novisti rectius istis,  
Candidus imperti,—si non his utere mecum.

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#### FALSEHOODS OF FRENCH QUARANTINE PEOPLE DISPLAYED.

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In order to show that, if quarantine people and their cads have been foully perverting facts connected with the

public interest in this country, the fatteners on the contagion bugbear in France have not been idle, we give the following extracts from an article in the *Lancette Française* of the 6th instant:—

*“New proofs of the veracity of Contagionists.”*

“A medical Journal, in giving in its last number an account of a Memoir by Drs. Trompeo and Rolandis of Turin, on the cholera morbus of Paris, states, ‘that one of the most remarkable circumstances cited by the authors in favour of contagion is, that of a certain number of mattress-makers, who, having been occupied in carding the wool of beds previously used by cholera patients, were, almost all, attacked with the disease,—but, (says the journalist,) I do not know where those gentlemen obtained their information, or whether it be true.’

“They obtained it from the mouth of the grand master of contagion, M. Pariset, who positively affirms that it occurred at the Salpêtrière. As to this statement, we can assert that it is not true,—that, far from almost all the mattress-makers in question having been attacked, very few of them had the disease; and we do not see why they should have been more exempt from the epidemic influence than the other inhabitants of that vast establishment, who suffered greatly from cholera, not excepting the insane.

“In a similar manner did Messrs. Pariset and Audouard assert, that the mattress-makers of Barcelona were almost all attacked with the yellow fever, as the consequence of their particular occupation, during the epidemic of 1821 in that city: but M. Chervin subsequently placed before the Academy of Medicine authentic declarations from the mattress-makers, proving that the statement of Messrs. Pariset and Audouard was utterly fabulous.

“It is thus, nevertheless, that *Messieurs les Contagionistes* write the history of events, and enlighten

governments which place confidence in them.

“Why is it to be wondered at that our neighbours adopt the most rigorous and absurd measures against the pretended contagion of cholera, when we see certain paid agents of government become the apostles of that chimera, and, in their zeal for the cause which they defend, falsify the facts which pass before our eyes.”

The two persons referred to in the above extract, Drs. Pariset and Audouard, have, from the nature of their employments, long proved the very great utility of quarantine regulations—to themselves. How truly was it said last year by Magendie to Lord Auckland,—“If you wish, my Lord, to get rid of contagion, *pay no quarantine people.*” He told the same to the Prime Minister of France. What thousands of lives might have been saved had this advice been taken! In this country, the mischief arising from the fatuous decision, against evidence, of the committee of imbeciles first consulted, might have been stayed: events would have reached the public eye in a purer shape, instead of being artfully dressed up by a *grand-maitre*, with his tried lieutenant, and a troop of mercenaries. Communities, not being foully swindled out of their common sense, would have been able to appreciate, very soon, the difference between a cause and a mere coincidence; the gates of the splendid public hospitals, which are such an honour to the country, would not have been closed against the sick, who, as we well know, have perished in many instances, for want of due accommodation and attendance. We are well aware that the most consummate art has been practised by a knot of fattening contagionists, to propagate through every possible channel their doctrines from this to other countries. In our last number we gave proofs that the medical men in the United States seemed to be judging for themselves, however, unbiassed by management practised here. But far

otherwise it seems to be, we are sorry to say, with the people at large there ; for it would appear that, with them, the falsehoods propagated by some of the *employés* in this country, as to cholera being transportable by such things as the sails and ropes of a ship, &c. &c., have gained credence, and, as may be seen in an extract of a letter from Watertown, given in the Paris Medical Gazette of the 9th inst., the sick are, consequently, treated like wild beasts—" *On traite un pauvre malade comme une bête farouche!!*" A dungeon and bread and water for the remainder of their lives would be but inadequate punishment for the mischief inflicted on society every where by persons who have, from interested motives, been active in propagating the most fiendish doctrines.

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ON THE INFLUENCE OF THE  
NERVOUS SYSTEM,

IN THE FORMATION AND DEVELOPMENT OF DISEASES.

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SUCH is the title of a Memoir read at the last meeting of the Academy of Sciences, by M. Double, one of the candidates for the chair vacant by the death of the celebrated Portal. Contrary to the doctrines of a rival candidate (Broussais), which have had such an influence for several years past, and which referred all diseases primarily to lesions of organs, M. Double considers the agency of the nervous system principally as the *point of departure* in the formation of diseases. This gentleman thinks, that as the nervous system is *le grand-dominateur des actes physiologiques de l'économie*,—that as it determines the development and general form of organs in animals, and presides over, or directs, their functions when developed, the *anormal acts* by which the regular mechanism of the economy is disturbed and disease produced, should be considered as originating there also. "From a derangement of the sensibility," says M. Double,

"proceeds many lesions in sporadic or epidemic diseases. On the moment of the invasion of a disease, there is generally a feeling of *malaise*, of lassitude, of unfixed pain in the limbs, with sudden alternations of heat and chills ; there is want of animation, heaviness of the head, yawning, and stretching of the limbs ; there is an exaltation of the senses ; increased sensibility to light, sound, and odours ; a parched skin, and, in fine, a feeling of internal disturbance, which is exercised on all the functions, the whole demonstrating a lesion of the nervous system."

As no man stands on higher ground in the profession than M. Double, we shall take another opportunity of laying his views more at large before the public. Though they possess no novelty, perhaps, the opinions of a physician, endowed with so penetrating a mind, are likely to give the *coup de grace* to an extravagant doctrine long unduly, and we would say arrogantly, pressed upon the profession. As far as cholera is concerned, the views promulgated in India by Dr. Burke and other observers, as well as by Dr. Auzoux, and others in Europe, more recently, would seem to receive confirmation from the contents of M. Double's memoir ; as also those of Dr. Gillkrest on yellow fever, as suggested in the Cyclopedia of Practical Medicine.

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PROPOSAL TO INJECT THE BLADDER  
IN DROPSY AND CHOLERA.

To the Editors of the London Medical and  
Surgical Journal.

GENTLEMEN,

I TAKE the liberty of suggesting for publication, in your valuable Journal, the utility of throwing warm water, combined with tincture of squills, digitalis, or rhubarb, into the bladder, in cases of cholera morbus. Such practice has been found useful in aiding other remedies in the cure of dropsy.

I have the honour to be,

Your obedient servant,

MEDICUS.

London, Oct. 31, 1832.

## DR. WATSON ON HÆMATURIA.

“ IN one of the Lumleian lectures, which Dr. Watson has recently been delivering before the College of Physicians, there are some remarks on hæmaturia, which may be noticed.

“ Blood may proceed from any part of the secreting or excreting urinary apparatus—from the kidney, ureter, bladder, or even urethra, in consequence of stone—from the kidney or bladder, in consequence of malignant disease—from any part of the apparatus, in consequence of inflammation—from some determination to these organs, arising without obvious or definable cause, or occurring periodically or vicariously with the hæmorrhoidal flux, or in scurvy and purpura hæmorrhagica, or in some cases of dropsy, especially that occurring after scarlet fever, or when excessive venery has been indulged in. These, and probably some others, are causes of hæmaturia, and in determining which has operated in the individual case, consists the tact and sagacity of the practitioner.

“ Dr. Watson mentions the following instance of hæmaturia from one of the causes alluded to:—A young man came to the Middlesex Hospital with hæmorrhage from the urethra, and said that he had lost a considerable quantity of blood in this manner in the course of a few hours. He stated that he had passed the previous night with a female in whom the catamenia had just returned, and he imagined himself inoculated with the flux. The bleeding was owing, no doubt, to rupture of a vessel or vessels in the excited urethra. We have seen an instance of the same kind, and apparently owing to the same cause, but the patient had just recovered from severe gonorrhœa and inflammation of the mucous membrane of the bladder.

“ Blood in the urine communicates to it a red tinge, more or less deep, and by that tinge its presence is determined. But other substances and

conditions of the system colour the urine; the prickly pear or Indian fig will do it. The Spaniards, on their discovery of America, ate largely of this fruit, and were alarmed by the consequence. Ellicot's people, in his travels for determining the boundary of the United States, ate plentifully of the same fruit, with the same result and the same alarm. Beet-root produces a similar effect, and a curious instance of red-coloured urine, in a man accustomed to take beet-root for supper, is related by Desault. Madder, some species of strawberries, and drinks of sorrel, are said to do the same. The simplest and most satisfactory criterion of blood in the urine is afforded by raising the fluid to the boiling temperature; the blood will furnish a brown coagulum, while the rest will regain the natural colour of urine.

“ Let us glance at the diagnostic marks of hæmaturia, having its origin in the various parts on the conditions before mentioned.

“ Dr. Prout has said, that ‘ blood derived from the kidney is generally equally diffused through the whole urine: derived from the bladder, it for the most part comes away, in greater or less quantity, at the termination only of the urinary discharge, the urine having previously flowed off nearly pure.’ With all due submission to Dr. P. we think this must depend, in a great degree, on circumstances; and, from what we have seen, we would not care to attach great importance to the distinction. There is one appearance which, when present, is characteristic of hæmorrhage from the kidney, or commencement of the ureter, viz., the expulsion with the urine of small cylindrical portions of fibrinous coagulum, the moulds of the ureter; they are commonly whitish, and often look like slender maggots or small worms. Dr. Cullen says, that he saw coagulum come away almost dry, like the half-burnt wick of a candle. The attendant symptoms of hæmorrhage from the kidney, or commencement of the

urethra, are, probably, a sensation of heat, weight, or pain in the situation of the kidney, or one side of the body. If a calculus has previously descended from the kidney, or if the symptoms usually characterising such a descent be present, the diagnosis is made still stronger. But if these kidney symptoms be absent, and those of stone, or inflammation of it, or diseased prostate, be present, we may presume that the bladder is the seat of the hæmorrhage.

"Dr. Prout thinks we may pronounce, with much confidence, on the existence of malignant disease, by a reddish sediment which the urine throws down, the characters of which are difficult of description, but strike the experienced eye.

"The hæmorrhage occasionally accompanying strangury from turpentine or cantharides is, probably, from the character of the symptoms, the result of some inflammatory action. M. Renoult describes a troublesome hæmaturia which affected the French troops in Egypt, especially the cavalry, and even their horses. There was much pain in the situation of the bladder, extending to the glans penis, frequent and urgent desire to make water, the last drops being often pure blood, and passed with acute pain. On examining the bladder after death, M. Renoult found its mucous membrane inflamed.

"A diseased bladder will give rise to hæmorrhage, as all practical surgeons know. A curious case happened to Mr. Heaviside:—An old East Indian, subject to nephritic complaints, was suddenly seized with what seemed to be retention of urine. A catheter was passed; no urine flowed, and it was thought the instrument had not entered the organ, in the seat of which was an evident tumour. The patient died next day. The bladder was found distended with a large coagulum of blood, which had come from the diseased mucous membrane; there was no blood in the kidneys or ureter.

"When pure blood comes away, it is probably from the urethra.

"In many cases of hæmaturia, the symptoms are very indecisive, the causes very obscure. In such, Dr. Watson thinks the hæmorrhage usually renal, and probably he is right. Calculi may exist in the kidney, as every body knows, without giving rise to obvious symptoms, and may there give rise to hæmorrhage.

"The expulsion of blood in hæmaturia is sometimes attended with rigors, as the passage of a bougie, of a small stone, &c., often is. Dr. Elliotson had a case of intermittent hæmaturia occurring in a person who formerly had a Walcheren fever; it always accompanied the cold fit of an ague, and was cured by quinine.

"Sometimes the blood coagulates in the bladder, and gives rise to much inconvenience, or even forms the nucleus for stone. It is to be suspected when, after the recent passage of blood by the urethra, the patient continues to void brown or dark urine, depositing a chocolate-coloured sediment.

"This is the substance of Dr. Watson's remarks on hæmaturia."—*Medico-Chirurgical Review*.

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#### ACADEMY OF SCIENCES.

*Election of a Member in the place of Baron Portal.*

NEVER has more excitement been displayed, on the election of a member by the Academy of Sciences, than on the 29th ultimo, when that body proceeded to elect a member for the section of medicine, in place of the late celebrated Portal. The death-blow seems to have been given to the exclusive doctrine of Broussais, that gentleman having obtained a few suffrages only. M. Double is the successful candidate, being, by two votes, higher than M. Breschet.

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## NECROLOGY.

On the 29th, Professor Delpech, of Montpellier, whose fame has spread throughout the civilised world, was assassinated under the following unaccountable circumstances:—A patient, whom he had cured, and with whom he was on good terms, fired at the doctor as he passed by in his cabriolet, and shot the servant dead. He then fired a second shot, which wounded the doctor mortally, and caused his death. The assassin now retired to his residence and blew his brains out. No reason has been assigned for the atrocious act. Science has lost a zealous votary in M. Delpech.

## BOOKS.

**ELEMENTS of Anatomy.** By Jones Quain, B.M., Professor of Anatomy and Physiology in the University of London. Second Edition. London. 1832. 8vo. pp. 812. John Taylor.

This is the production of decidedly the best and most popular teacher of anatomy in London. Professor Quain has the largest class in the metropolis, and this work proves him justly entitled to it. The style is concise and perspicuous; the contents and copious index afford the student an immediate reference to every term in anatomy. The typography and execution do credit to the publisher.

**An Essay on the Structure and Functions of the Skin,** with Observations on the Agency of Atmospheric Vicissitudes, through the Medium of the Skin, in the Production of Affections of the Lungs, Liver, Stomach, Bowels, &c. By William Wood, M.D., &c. &c. Edinburgh. 1832. 8vo. pp. 72. MacLachlan and Stewart.

This is an exceedingly interesting essay on the physiology of the skin, and the influence it exerts in the production of diseases.

**The British Cyclopædia of Arts, Sciences, Manufactures, Commerce, Literature, History, Geography, Politics, Biography, Natural History, Biblical Criticism, and Theology,** on the basis of the celebrated German Conversations-Lexicon, with such additions and improvements as will adapt it to the wants of the British public. By Charles F. Partington, Esq., Professor of Mechanical Philosophy, &c. &c., assisted by other authors of celebrity in the various branches of science and literature. Division I. Part I. Royal 8vo. pp. 80. With numerous engravings, and price 1s.!! London, Nov. 1, 1832. William Orr.

This is one of the cheapest works we have yet seen, is beautifully printed, and is replete with instructive information.

**On the Structure of the Human Placenta,** and its Connexions with the Uterus, &c. By Thomas Radford, Senior Surgeon to the Lying-in-Hospital and Dispensary for Diseases of Women and Children, and Lecturer on Midwifery at that Institution. 1832. Manchester, Leech and Chatham, 8vo. pp. 23. 3 Plates.

**An Account of the First Meeting of the Provincial Medical Association,** held in the Board Room of the Worcester Infirmary, on Thursday, July 19th, 1832, containing the Address, delivered by Charles Hastings, M.D., together with a correct Report of the Meeting. Worcester, Tymbs and Deighton; London, Baldwin and Co.

**The Panorama of Torquay; a Descriptive and Historical Sketch of the District** comprised between the Dart and the Teign. By Octavian Blewitt. Second Edition, 12mo. pp. 288. A Map and numerous Engravings. London, 1832. Simpkin and Marshall.

**An Essay on Tubercles.** By Nathaniel Rogers, M.D., Senior President of the Hunterian Society of Edinburgh. Edinburgh, 1832. 8vo. pp. xx. [From the Edinb. Med. and Surg. Journal, No. 113.]

**Popular Observations on Diseases of Females,** with an Appendix on the Use of the Author's Obstetrical Instruments. By John Peacock Holmes, Esq., Surgeon. London, 1831. 8vo. pp. 62. Jones and Son, Ave-Maria-lane.

This is a sensible, instructive work, and will be perused with benefit by medical and general readers. The author's improvements in obstetrical instruments are admitted by the first obstetricians in London, and we highly approve of them.

## NOTICE TO CORRESPONDENTS.

Mr. Bransby Cooper's Clinical Lectures on Surgery, delivered at Guy's Hospital, in our next.

Mr. S. of Dublin will oblige us by forwarding his communications as early as possible.

A Paris Correspondent will oblige by forwarding his communication through the respectable firm of Bailliere and Co.

Professor Harrison's Lecture at the Royal College of Surgeons, Dublin, next week.

Professor Graves's Clinical Lectures have not commenced as yet.

Professor Magendie's Lectures on Cholera too late for this number.

*Dr. W.* The house alluded to at the Medical Society of London where genuine Hydriodate of Potass was procured, was Garden's of Oxford-street.

Sir Anthony Carlisle's Clinical Lecture on Surgery, at the Westminster Hospital, and his comparison of his art to a game of whist, will appear in our next.

*Mr. B.* We shall be obliged by an inspection of the remaining communications.

*Dr. Wightman* of Newcastle-upon-Tyne, in reply to An Army Medical Officer, in our next.

*Dr. M.* We shall notice the Piracy perhaps next week.

*Dr. Hood's* valuable communication in our next.

# London Medical and Surgical Journal.

No. 42.

SATURDAY, NOVEMBER 17, 1832.

VOL. II.

## LECTURES

ON THE

## PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

Delivered at the University of London,  
SESSION 1832—1833,

BY

PROFESSOR SAMUEL COOPER.

LECTURE VII., DELIVERED OCT. 17, 1832.

*Treatment of Inflammation.*

GENTLEMEN,

HAVING explained the symptoms, common effects, causes, and general nature of inflammation, I may now enter into the consideration of its treatment. I did, indeed, commence this part of the subject in my last lecture, when I observed, that there were two indications to be borne in mind in the treatment of inflammation; of which the first is, to remove the exciting cause, if it be still in operation, and the second, to lessen the determination of blood to the part affected. Although, in certain cases, inflammation clearly appears to be a process set up for beneficial purposes, and is to be regarded as salutary and even necessary; yet it more commonly happens that, from its extent, situation, or violence, it cannot be regarded in this light; and, being then more likely to destroy than to serve the patient, it demands the employment of every means in our power, calculated to check and subdue it. Serious consequences frequently follow attacks of inflammation when it is violent, of great extent, or situated in important parts, unless such attacks be resisted by active measures: large abscesses sometimes form, the functions of important organs are impaired or destroyed, and, what is worse, the patient sometimes dies from the amount of local mischief and constitutional disturbance produced. If the bills of mor-

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tality were correctly made out, I am convinced, that the greater number of deaths would be found to be caused by inflammation, in some form or another. This is so true, that the words, which Milton made use of in speaking of the forbidden fruit, might, and, indeed, have been applied to inflammation, as having

“Brought death into the world and all our woe.”

But, even when inflammation does not kill by its violence, extent, or situation in important parts, it frequently gives rise to evils which can never afterwards be repaired. From the account which I have already given of its nature, you must be aware that it renders transparent textures opaque; that it thickens, hardens, and enlarges the generality of parts affected by it; that it causes an effusion of coagulating lymph, which sometimes becomes vascular and organized, so as to produce permanent adhesions between surfaces, which ought to move freely one upon the other, or at all events not to be united. It also brings on ulceration and mortification. By producing such changes, it often completely destroys the functions of organs, or so impairs them, that they can only go on in a disordered, weakened, and imperfect manner. These facts we frequently see illustrated in inflammation of the eye, where, if the disorder be not successfully resisted, we find opacities of the transparent textures produced; the pupil blocked up with coagulating lymph; the iris thickened and rendered immoveable, and the cornea sloughing, or ulcerating, so as to occasion a discharge of all the humours, and a total collapse and destruction of the organ. In other inflammations of the eye, you will often find adhesions take place between the iris and the inner surface of the cornea, or between the iris and the capsule of the crystalline lens. In fact, in the eye, gentlemen, you may see all the effects of inflammation delineated in a manner which you will never forget: transparent parts rendered opaque; parts, which ought to be moveable, fixed by adhesions; textures surprisingly thickened and

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swollen; the white conjunctiva converted into one uniform vivid redness, by the dilatation of its vessels; even the retina paralysed, and its functions irreparably destroyed.

Then, gentlemen, when parts, not merely valuable from their functions, like the eye, but absolutely essential to life, become attacked by inflammation, which we have seen is followed by such a train of formidable consequences when neglected, the necessity for active treatment is still more urgent. Thus, when the lungs, the brain, or the intestines are inflamed, if rigorous antiphlogistic measures be not speedily adopted, and you allow the disorder to make a certain progress, your patient will generally perish, whatever plans you may afterwards determine to pursue.

The fact, then, being established, that inflammation, so far from being always a salutary process, is sometimes an injurious, destructive, or fatal one, it becomes the imperious duty of the surgeon to adopt, in every example of it which is of a serious nature, the most prompt and efficient means to oppose and subdue it. You are already aware, that, in the commencement of the treatment of inflammation, there are two principal indications, namely, *to remove the exciting cause*, if it be still present and in operation, and *to lessen the determination of blood to the part*. With regard to the first, the exciting cause, it is, in many instances, not present; its operation, which was momentary, having already ceased. Thus, when inflammation is caused by a mechanical injury, done in a moment, the exciting cause continues, of course, no longer than the instant of the infliction of the wound, whatever be its nature; but a re-action must follow, constituting inflammation itself. But, in some examples, the exciting cause does continue in operation; as where sand or extraneous substances are lodged between the eyelids and the front of the eye; and, in such cases, it is absolutely necessary to remove them as soon as possible, for, until this be done, it must be evident, little or no benefit can be expected. *The second indication is to diminish the flow of blood to the inflamed part*, by which means we remove, in a great measure, that by which the disorder is kept up.

Now, gentlemen, I may observe, that the second indication is fulfilled, either by plans which act *directly* on the part affected, or by others which act *indirectly* upon it, that is to say, through the medium of the constitution. There are likewise other means of treatment, which operate on a principle different from the two which I have mentioned, being founded on the knowledge of the *sympathy which exists between different organs*; counter-irritation is a remedy of this kind, which is often of essential service when employed with the precautions which I shall hereafter notice. The first class of means, namely, those which operate directly on the part affected, are denominated *local*, or *topical*; and the second class, or those which act indirectly, are called

*general*, or *constitutional*. These latter are chiefly blood-letting by venesection, arteriotomy, or cupping; saline purgatives; tartarized antimony in diaphoretic, or even nauseating doses; quietude, both of body and mind, and the removal of every thing likely to stimulate the system. The patient must, therefore, be kept cool and quiet, carefully avoiding all causes which might have the effect of agitating him, or accelerating his circulation. The *local* measures to be employed consist of bleeding by means of cupping or leeches, the application of cold lotions, emollient poultices, fomentations, and, especially after depletion has been duly practised, blisters, which produce their good effects on principles which deserve some further notice, when the opportunity for it arrives.

In all acute inflammations of any extent or violence, bleeding should be had recourse to, and in such a quantity as to produce an effect on the whole system. This practice is the best that can be adopted; it is what the experience of many generations pronounces to be the great antiphlogistic plan most entitled to reliance; and this is so strictly the fact, that the preservation of life often depends, not only on blood-letting being speedily and freely performed, but on its being repeated as frequently as circumstances may require. In inflammations of the brain, lungs, pleura, or bowels, the patient must be bled, and this promptly, freely, and repeatedly, or life will sometimes be lost in a few hours; indeed, to omit blood-letting in such cases would be to leave the patient to the poor chance of an accidental recovery. I need scarcely observe, that if there were no blood-vessels in parts, or if there were no blood in the vessels, there could be no inflammation; and if we join with these truisms a thing equally certain, namely, that the continuance of inflammation depends on fresh supplies of blood being sent to the part affected, we must discern good reasons for lessening the mass of blood in the circulation. By so doing, we moderate the action of the heart and arteries, and not only diminish the quantity of blood transmitted to the inflamed part, but also, in proportion as we reduce the force and velocity of the whole circulation, we reduce the impetus of the blood flowing to the seat of the disorder. Indeed, if thousands of other examples had not convinced me of the great utility of blood-letting, in the cure of inflammation, there would be one case which, of itself, would never leave me in doubt on this very important point. If, in severe inflammation of the tunica conjunctiva of the eye, we have recourse to blood-letting, we find that, in proportion as blood is abstracted, the redness of that membrane visibly diminishes; the colour, which at first was scarlet, becomes a pale pink; the vessels shrink, and the redness may be almost said to be removed by the time the operation is completed. When you bleed, then, in ophthalmia, you have something like what amounts to a *demonstration* of the benefit of blood-letting.

In wounds of the head, chest, and abdomen, the chief danger to be apprehended is from the supervention of inflammation; and if the patient be not duly bled, after that disorder commences, he will soon die. In such cases, the practitioner must determine to bleed expeditiously, freely, and repeatedly: he must not be content with taking away scanty quantities of blood; he must not be deterred by smallness of the pulse, or other appearances of weakness. In the Memoirs of the French Academy of Surgery, we read of patients, each of whom lost as much as three hundred ounces of blood in eight or ten days; a prodigious loss, rendered necessary for the relief of inflammation in vital parts. I have myself seen cases in which nearly the same quantity of blood has been taken away in as short a period. A few days ago, I was called to the case of a young gentleman who had been accidentally stabbed in the back, and one of whose intercostal arteries appeared to have been wounded. The symptoms were so severe, that the freest use of the lancet became indispensable, so that in six days seventy ounces were taken away, although he was only about ten years of age. Now, if we take into the account what he had previously lost from external and internal hæmorrhage, I imagine that the quantity of blood which was abstracted from the circulation, in the course of a week, must have been nearly double the seventy ounces which I have specified.

Gentlemen, bleeding is not always necessary in *slight* inflammations of *common* parts;—I say of *common* parts, because in *important* parts, however *slight* the inflammation may be, bleeding should not be omitted. It is necessary, also, to consider the age, the strength, and the constitution of the individual. It must be evident to all of you, that an aged or weak person will not bear depletion so well as a young or robust individual; yet, notwithstanding the truth of this proposition, when we wish to check an inflammation in an important part, whether the patient be old or young, weak or strong, we must place our principal reliance upon blood-letting; though of course it will not be prudent to carry it to the same extent as in younger or stronger subjects. A small quantity, abstracted from weak aged individuals, is equivalent to a larger quantity taken from the strong. The fact of the utility of bleeding for the relief of inflammatory complaints is so well established, that, in every severe instance of that disorder, we employ not merely general bleeding, but also local bleeding, by means of cupping and leeches.

Gentlemen, I must mention, however, that there are some constitutions, not essentially joined with old age and debility, but characterized by excessive nervous irritability, which will not bear bleeding to any considerable extent. This fact is particularly noticed by Professor Andral, in his work on Morbid Anatomy:—he says, that in individuals who, during the course of an acute inflammation,

have already lost a considerable quantity of blood; or who, during a tedious convalescence, have been kept for some time on a low diet; and in those who, after a severe attack of acute inflammation, continue to be afflicted with the chronic form of the disease, the nervous system is exceedingly apt to become violently disturbed by the abstraction of even the slightest quantity of blood. He particularly mentions one example of this, where the bite of a single leech was sufficient to bring on incipient symptoms of tetanus. In fact, under circumstances such as I have just mentioned, coma, delirium, and spasmodic affections are to be apprehended, if blood be incautiously abstracted. Therefore, gentlemen, you must always consider the constitution of the individual who is labouring under inflammation, and take your measures accordingly. With respect to these nervous, irritable temperaments, if bleeding be useful at all in them, it is only in the beginning of the inflammation; and if this opportunity be lost, the evacuation will not avail afterwards.

Gentlemen, I have already told you of the instruction to be derived from the appearance of the blood taken away; I mean from its buffy condition, or the cupped or excavated appearance of the surface of the coagulum. We must join these appearances with other circumstances, namely, the state of pulse, the nature and degree of the fever present, and the kind of pain; and from all these considerations, taken together, we can generally judge of the existence, extent, violence, and seat of inflammation, and form a correct opinion about the propriety of taking away more blood. In very urgent cases, it is sometimes advisable to bleed until the patient faints, *ad deliquium*, as it is called; because when a person faints, all operations in the system are instantly suspended, and, among the rest, the action or operation of inflammation. Now, gentlemen, for the purpose of inducing deliquium, it is necessary to make the opening in the vein large, so that the blood may flow away more suddenly, for on the quickness or suddenness of the abstraction depends, in some measure, the success of the attempt. If the patient be not too ill, it is also advisable to bleed him while he is standing, or sitting erect, because, in those postures, half the quantity that would be necessary when the person lies down will, in most cases, be sufficient to produce the effect. In severe cases, we make use of topical bleeding as an auxiliary to general bleeding; but in such examples we must never dispense with the latter: indeed as long as a plethoric condition exists, topical bleeding will not have its due effect, and alone will not be sufficient to subdue the inflammation. We may be content with topical bleeding where the symptoms are not sufficiently severe to require general bleeding, or where, on account of peculiar circumstances, the system will not bear much bleeding from the arm. Local bleeding, by means of leeches and cupping, are also fre-

quently of great service in those inflammations which partake more of the chronic than the acute form. In general, the effect of topical bleeding, when there is no plethora, is greater than we should expect from the quantity of blood taken away. Pathologists account for this, by supposing the smallness of the evacuation compensated for by the nearness of the bleeding to the part affected, the effect being, as it were, concentrated almost on that particular part. However, by cupping, or applying a great number of leeches, sufficient blood may be taken away to produce an effect upon the system at large: these forms of bleeding may then be regarded as general. When I was a student, the employment of leeches in the number, and to the extent, which we now see in practice, was never adopted. Eight, ten, or twelve of these animals would sometimes be applied; but I do not remember ever having seen dozens put on at once. A year or two ago, I had a patient with phlegmonous erysipelas, on whose head, face, and neck, I counted fifty leeches, all diligently performing their duty at the same time. Such bleeding as this is not merely local; it produces an effect on the whole system, as you may readily conceive; the quantity of blood from the bites of so many leeches being very considerable.

The symptomatic fever, which accompanies every severe attack of inflammation, always produces constipation. The removal of this confined state of the bowels, then, is another indication in the treatment of inflammation. For this purpose, mild saline purgatives, which act without producing much irritation, are generally preferred; the *sulphates of soda* and *magnesia*, and the *tartrates of potassa* and *soda*, are the medicines of this kind most usually employed. In certain cases, more active purgatives certainly may become necessary, such as *colocynth* with *calomel*, or *calomel* with *James's powder*. It is sometimes also necessary to assist the operation of these purgatives with clysters. Mild purgatives have a considerable effect in diminishing the strength and frequency of the pulse, and in lessening the force of the circulation; you see, therefore, one manner in which they are useful. Another principle on which they are remarkably serviceable is, the increased secretion which they produce from the intestinal canal. They cause a prodigious secretion from the surface of the mucous membrane of the bowels; and when you consider the immense extent of that surface, and the quantity of fluids thus abstracted from the circulation, you must at once recognise the manner in which mild purgative medicines become so beneficial. Amongst the remedies which act through the medium of the constitution, I must not omit to notice *mercury*. The powerful effect of mercury in stopping the effusion of coagulating lymph in inflammation, is a fact made out only within the last thirty years. It was first noticed, I believe, in Germany, but brought into still greater publicity by Mr. Saunders

and Dr. Farre, soon after the City Eye Infirmary had been established. They found that, in inflammation of the iris, mercury was most successful in preventing the effusion of coagulating lymph, and likewise in promoting the absorption of that which was already effused. In acute laryngitis, or croup, it is in this way that mercury also proves useful, namely, by promoting the absorption of the lymph effused in the larynx, and preventing a further effusion of it. Mercury, however, is not advisable in all cases of inflammation; indeed, in few acute cases, except the particular examples which I have mentioned. In chronic inflammations, I may say, that generally it is of great service, when there has been much effusion of coagulating lymph, by which the parts have become considerably thickened or indurated. Generally speaking, the use of mercury should be preceded by depletion—bleeding, purging, &c.

Another medicine of great service is *tartarized antimony* in small doses. This medicine is useful in two ways, first, by lessening the dryness of the skin and promoting perspiration; and secondly, in larger and freer doses, by producing nausea; because, during the existence of nausea, not only is perspiration more likely to be abundant, but the pulse is at once reduced. No doubt, considerable benefit sometimes results, from the employment of tartarized antimony with these views, and also from the efficacy of the medicine in promoting the alvine evacuations; but if we were to depend entirely upon it—if we were to lay the lancet aside—I should say, that the practice would not be less severe, nor perhaps so effectual. In Italy, this medicine is given in very large doses, as much as two grains or more, and it is alleged that its effects are not so violent as we might expect from the largeness of the doses; while, if we are to believe the same accounts, the benefit derived from the practice is so great as almost to supersede the necessity for the lancet. At present, however, in this country, we generally prefer bleeding to so free an employment of tartarized antimony. I am not certain whether this medicine has ever been used in London to the extent I have mentioned. When we give it merely for the purpose of keeping the skin moist, the dose is one-sixth of a grain every four hours; when for that of producing nausea, we give a quarter of a grain every two or three hours: generally, the effects are then not violent; but English patients mostly prefer being bled to being nauseated; the punishment of the latter method being to them much greater, and, as I believe, its efficacy less to be depended upon.

There is another medicine occasionally used in inflammation; it is used, as it were, against our will; I allude to *opium*. This medicine should never be given when we can avoid it; but sometimes the pain is so considerable that we are reluctantly compelled to administer it. Unfortunately it does not always succeed; but, on the contrary, increases the fever, the rest-

lessness, and the constipation. The general rule in this country is to give it only when it cannot be dispensed with: thus, after severe operations it may become necessary to administer opiates to alleviate the pain. In these instances, I believe, they answer better than when inflammation is already established. There are certain preparations of opium which are occasionally preferred to opium itself, being thought to produce less fever, less constipation, and less restlessness. The *acetate of morphia* is one of them; another is the black drop; and a third is the *liquor opii sedativum*. Such preparations are supposed to contain less of the irritating stimulating principle of the opium.

In addition to the foregoing plans of treatment, we must enjoin a low diet, from which all animal food, wine, and fermented liquors should be rigorously excluded. The patient should be placed in a quiet apartment, in which there must be no conversation, and no noise of any kind; its temperature must be kept low, and the patient not be heated with too much bed clothes. Ignorant people sometimes load a sick person with blankets. I need not say that this custom is pernicious in cases of inflammation; for one chief indication is to lessen the force of the circulation, and we know that heating the patient always has the contrary effect. The several measures and plans I have mentioned, constitute what is called the *antiphlogistic treatment*.

I must now, gentlemen, speak of local remedies. One effect of inflammation is generally to produce a rise in the temperature of the part; at least, the patient complains particularly of the distressing heat which he feels. I refer to acute inflammation; for, it is in acute inflammation alone, that this feeling of heat is so annoying. The surgeon would probably be inclined to use means to lessen this painful sensation of heat, if his object were merely to relieve the patient from the uncomfortable state in which he is placed by it; but, there is another and a more important reason than this for doing so. Heat promotes every process going on in the system, and the process of inflammation among the rest; therefore, by reducing the temperature of the part inflamed, we are doing what tends to put a stop to the process. The most effectual way of lowering the temperature of a part is by covering it with linen dipped in a very cold lotion, or in cold water. One drachm of the *liquor plumbi subacetatis*, and a pint of water, with about two ounces of *camphorated spirit*, form a very good lotion for this purpose; or, in some cases, the *liquor ammoniæ acetatis* diluted with water, and a small quantity of camphorated spirit, is employed. However, when the surface is excoriated, or ulcerated, the most simple lotions are the best. The grand principle is to keep up a continual evaporation; and, on this account, it is necessary to wet the linen frequently, or it will become dry, hard, and stiff, and increase the pain and uneasiness. In certain examples, warm applications are found

to have a better effect than cold ones; the exact reason of this fact is not known. We have seen that cold is useful by diminishing the heat of the part; but, with respect to warm applications, the rationale of them, generally given, is this, that they soften the inflamed textures and diminish tension: warmth, then, in some cases, answers better than cold; for an inflamed testicle, an emollient poultice is frequently more beneficial than a cold lotion. I should particularly notice, that all those inflammations which, from their nature, unavoidably and constantly proceed to suppuration, are most relieved by warm applications. For the critical abscesses of fevers, for whitows, boils, carbuncles, and all kinds of abscesses about the anus, poultices and fomentations constitute the most eligible applications. The common linseed-meal poultice is that which is most used; it is readily prepared: you put a little hot water into a basin, and sprinkle the linseed-meal gradually into it, at the same time stirring it with a spoon, and continuing to add more of the meal, until the mass is of the consistence required for a poultice. This, when spread on linen, or tow, forms an excellent application. Some practitioners add a little oil, in order to prevent the poultice from becoming hard and dry, but if it be often renewed, this is unnecessary, as the linseed is itself of an oleaginous nature. Then we have the bread poultice, made of bread and water, bread and milk, or bread and Goulard's lotion. These matters are so well known by all persons, that it is scarcely necessary to mention them. Then, gentlemen, with regard to fomentations, I am sure, that few of you do not know the method of preparing them; you may make a good fomenting liquor by boiling a quarter of a pound of chamomile flower, or poppy-heads, in a gallon of water. The fluid having been strained, is fit for use. These things are so familiarly understood, that I am almost ashamed to mention them. I need not enter upon the subject of the efficiency of these herbs, nor inquire whether the good effects of fomentations are not rather to be attributed to the warmth and moisture alone, which, I think, is the case; but, in practice, it is good policy not to make these things too simple, as patients would fancy there is no virtue in them. When, by the preceding plans, resolution has been effected, the parts frequently still continue weak and deficient in tone, especially after inflammations of the joints, and eyes: in these cases, it is necessary to use means calculated to improve the tone of the parts, and to restore completely their functions. When joints have been inflamed, blisters are frequently useful for this purpose, by exciting absorption of effused lymph, and diminishing the thickening of textures. Blisters should not be employed in the commencement of inflammation, that is, before depletion has been duly practised; but we have no applications which are better for the removal of the thickening and stiffness remaining after acute inflammations. Gentlemen, I

have yet a few more remarks to make upon the treatment of inflammation; I shall then consider suppuration and abscesses, and afterwards proceed to examinations on the subjects which we have gone over.

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## CLINICAL LECTURES

ON

### SURGERY,

DELIVERED AT GUY'S HOSPITAL,

BY

BRANSBY B. COOPER, ESQ., F.R.S.

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#### LECTURE I.

#### INJURIES OF THE HEAD—CONCUSSION AND COMPRESSION OF THE BRAIN.

GENTLEMEN,

HAVING been preceded by my colleague, Mr. Morgan, I feel it is quite unnecessary to make any introductory remarks upon the importance of clinical instruction, and yet I cannot refrain from illustrating the peculiar usefulness of this mode of study, by comparing it to the practical application of the finest tools in the hands of a skilful mechanic; and of remarking to you, that while it is one thing to know the complicated formation of such tools, it is quite another to use them efficiently and skilfully in the purposes for which they may be intended. So may you, gentlemen, become acquainted with the principles of your profession, and acquire a general knowledge of all its numerous branches, and yet be quite at a loss by the bed-side of the patient, merely because you may not have been exercised in the immediate application of your knowledge. Indeed, the medical profession is one in which practical experience is particularly valuable, for, in witnessing a disease, the eye of the medical observer is constantly informed of numerous important features, which it is not in the power of language to describe, but which, having been once seen, make an indelible impression, and are infallible guides in the detection of particular diseases.

I shall, therefore, avail myself of every proper opportunity of embodying clinical remarks, in explanation of the principles and practice adopted in this Hospital. There is, however, considerable difficulty in making a lecture strictly clinical, for it is necessary to point out some general surgical principles, before the features of any particular case chosen can be well comprehended.

For this my first lecture, gentlemen, I have selected the subject of injuries of the head, and principally those which are accompanied by injury to, or fracture of, the bones; and this choice is made, not because I have had lately some very successful cases, but from it accord-

ing so well with the subject now before us in the anatomical course.

The dangers, gentlemen, arising from injuries to the head depend either upon the immediate or subsequent effects upon the brain, and indeed even the apparently slight injuries of the superficial parts of the skull should be treated with great caution, and a good surgeon will not gratuitously offer to give a favourable prognosis. For it will sometimes happen from a blow upon the head, even when the scalp is not lacerated; the effect produces an extravasation of blood between the pericranium and the skull, separating this membrane from the bone, and producing a peculiar puffiness of the scalp; and, in this slight accident, there may arise a source of difficulty to the young surgeon; for if he be called upon to examine such a case, he will find so close a resemblance in the impression made upon his finger, to a depressed portion of bone, that without a knowledge of this fact he might be led to pronounce a wrong diagnosis. This delusion, however, vanishes upon pressure being increased to a degree capable of removing the coagulum, or effused serum, from between the finger and the bone, which will tend to make the depression (if existing) more evident, or it will dissipate the false impression. From such an accident, very frequently, dangerous symptoms subsequently arise; for the blood-vessels, which connect the pericranium and skull, being torn through, a laceration of the vessels of the dura mater also occurs, and a consequent separation of that membrane from the cerebral surface of the bone, depriving it of its necessary support, from whence a diseased action is set up, and by it the brain becomes affected, either by inflammation of its membranes, extravasation of serum or blood, or by the formation of matter, producing pressure and a train of symptoms, which will be described when speaking of compression of the brain. Sometimes the *scalp* and *pericranium* are lacerated as well as bruised, so as to denude the surface of the bones of the skull; the symptoms following such injuries are like those which arise from effusion under the scalp, and follow precisely the same order of symptoms before enumerated, although the consequences are usually more serious, from the cause producing such effects being more violent.

Another source of injury to the brain, in consequence of a severe blow upon the head, is *con-  
cussion*, without either being lacerated or compressed, producing symptoms which should be perfectly understood. In such cases, the patient appears stunned, the pulse weak and sometimes fluttering, the face pale, and the extremities cold: while in this state, if the patient be addressed loudly by name, he is capable of giving a rational answer, and, if re-action has taken place, the pulse, which might have been weak, or even natural in number, from this excitement, will rise to 100 or 120. The pupils, in simple concussion of the brain, are natural, and are capable of being stimulated by light,

but in a diminished degree. Nausea and even vomiting are frequently concomitant symptoms. In concussion, it may be said, that the patient's senses are weakened, not lost; that the power of volition is suspended, not destroyed. The pathology of concussion is but little understood; it has been considered by some to be the effect of venous congestion, but this is difficult to suppose, as vomiting, which must necessarily have a tendency to increase the flow of blood to the head, will restore the patient, and, in such cases, as where there is difficulty in producing re-action, an emetic may very properly be administered. It has already been mentioned, that, from injury to the external soft parts of the skull, and without fracture of the bones, compression of the brain may occur either from the effusion of blood, serum, or the formation of matter, and that the symptoms that arise from these causes are subsequent to the injury, and that each cause leads to certain distinct symptoms, sufficiently obvious to lead to a just diagnosis. For instance:—if the compression occurs either from the effusion of blood or serum, the symptoms, although they come on subsequent to the accident, will appear earlier than if they be the result of the formation of matter. Thus, a person may be struck to the ground by a severe blow, rise, walk some distance, stagger, and then fall from the effusion of serum; while, if the compression arises from the formation of matter, it occurs at a much later period, and is preceded by a train of symptoms similar to a formation of matter in other parts of the body, such as pain and rigors; after which, symptoms of compression occur, violent in proportion to the quickness and quantity of matter formed. The most frequent cause, however, of compression of the brain, to which a surgeon is called, is fracture of the bones of the cranium, accompanied with depression, which accident leads at once to compression of the brain, and renders it necessary for the performance of an operation. It is right, however, here to mention, that fracture of the cranium may be attended with every possible variety of circumstance, from a simple fissure, to a most comminuted division. Thus, there may be great depression of the exterior table of the skull, without any corresponding displacement of the inner table, either depending upon the peculiar situation in which the blow has been inflicted, as over sinuses, or perhaps merely from a full development of the diploe. It may also happen, that the internal table may be fractured and slightly depressed, without solution of continuity of the outer table; such an accident renders the diagnosis difficult, but the surgeon is to employ the usual constitutional means fitted for the relief of compression from any cause; as such an accident will necessarily ultimately produce the same effects, and the same symptoms, as are produced by extravasation between the pericranium and the skull, with this difference of order only, that in the latter instance the dura mater will be

primarily instead of secondarily affected, and subsequent puffiness of the scalp, from the separation of the pericranium, is the mark by which the surgeon is authorized to employ surgical means, after his constitutional remedies have failed, to restore his patient. It is not uncommon, in injuries of the head, to find that separation of the dura mater from the skull, or even fracture of the bones themselves, should happen some part distant from where the blow itself had been received. This occurs by what the French have termed *contre-coup*, and is so well authenticated, that the fact should always be held in mind by the surgeon when examining injuries of the head. The most likely part of the skull to be fractured by a counter-blow is the occiput, effected, perhaps, by a person jumping from a great height, when, by the sudden cessation of the descent of the body, from the feet coming in contact with the ground, the re-action is so great as to drive the spine upwards against the occiput, and produce fracture. Fractures of the skull need not necessarily produce compression of the brain, and therefore, whatever may be the degree of compression, extent of the fissure, or of comminution, unless there be symptoms of compression, no operation for the removal of bone, either by trephine or Hey's saw, should be employed, for such operations are unjustifiable as preventive means. There may be, perhaps, exceptions to this general rule, where, with laceration of the soft parts, pieces of bone may be seen so separated as to require no other operation than their removal by the forceps. The symptoms of compression, whether produced subsequently to injuries of the soft parts of the head, by an effusion either of serum, blood, or the formation of matter, or whether produced immediately by depression of bone, or sudden extravasation of blood, are marked by the patient being quite comatose, with the senses and volition entirely lost; the pulse is small, hard, and generally irregular, sometimes intermitting; the breathing stertorous, the pupils dilated, the retina no longer sensible to light,—sometimes, however, one pupil will be found contracted, and more rarely both. Perhaps there is no symptom, either in concussion or compression, more difficult to estimate as a diagnostic mark, than the state of the pupil. I should, myself, however, be inclined to consider contraction of the pupils as an unfavourable symptom, portraying destruction of the nervous influence of the eye, and consequently a great degree of injury to the brain.

#### LECTURE II.

##### COMPRESSION OF THE BRAIN.—RECOVERY.

GENTLEMEN,  
AFTER the remarks which I last made on symptoms of injury to the brain, it will be right that I should now draw your attention to a case of compression, which is at present in the hospital.



Michael Curley, *ætat.* 17, was admitted into Guy's Hospital, under my care, on the afternoon of the 9th July, 1832. It appears that, whilst exercising his master's horse, the animal took fright, and ran away. Some boys throwing up their caps before it, made the horse stop suddenly short, and the boy was thrown against the wheels of an approaching carriage. He was picked up by a policeman, and immediately brought to the hospital.

*Symptoms.*—The lower jaw was fractured in several places; the mucous membrane of the mouth was lacerated, rendering the fracture compound. He was totally insensible.

The state of the pupils I shall first make some remarks on. In pure concussion of the brain, the pupils have a natural appearance; one is not more contracted than the other, and they obey the stimulus of light, although more sluggishly than in the natural condition. Now, in this boy's case, "the pupils were contracted and inobedient to light," and I am disposed, from the cases I have seen in the course of my experience, to believe that the greater the contraction of the pupil, with *insensibility*, the greater the danger; although, in advancing this, I am aware I differ from the opinions of some of the best surgeons in London. The next symptom to which I shall call your attention is "stertorous breathing." Now this is a certain indication of pressure on the brain; it is present when bone presses on the brain, as the immediate effect of injury to the head; it is present when the patient rallies from the first attack, and then gradually becomes more and more comatose, arising from the effusion of blood; and it is present when the brain is compressed by pus, the result of inflammation, appearing sometimes as late as three weeks or a month after the accident. "The pulse was slow and labouring." Now this term is very indicative of the pulse of compression, never to be mistaken when once felt; this pulse was not capable of being excited and increased in frequency by stimuli, as in concussion, when, on rousing the patient (which can be done by calling him loudly by name), it will be found to rise from the natural number to 120. "Bleeding from both ears, more particularly from the right, also from the nose." This symptom, gentlemen, generally, and in nearly every case, denotes injury to the parts at the base of the brain. Now injuries to the inferior and posterior parts of the brain are more dangerous than injuries to the other parts of the brain, on account of the vital functions depending on that part more particularly. There is a paper in the *Medico-Chirurgical Transactions*, in which it is stated, that fractures of the base of the skull are only more dangerous by reason of the greater violence required to produce them; but from this I certainly must dissent, from the facts before mentioned. The next symptom is the only favourable one that was present, and that was that "the temperature of the body was not in the least diminished," for we find that when

great injury is done to vital organs, as for instance, a laceration of the intestines or liver, it is immediately followed by a cold, clammy sweat, great pallor, and ultimate death; but in this case, though there appeared great injury done to the brain, as shown by the contracted and inobedient pupil, bleeding from the ears and nose, slow and laborious pulse, yet still the temperature of the body was not diminished. He was examined by the dresser, who could detect no depression of bone, although there was great swelling and puffiness over the posterior and inferior angle of the right parietal bone; he then bled him to  $\text{℥xij}$ , and ordered him to take *hyd. submur.* gr. xv. Two hours after the bleeding the pulse became fuller and softer, and the breathing more natural, showing that the bleeding was attended with a beneficial result. A colocyntn enema was given him, his head was shaved, and the cold evaporating lotion was applied. Now this treatment was in itself very proper, but it could not be supposed to perform a cure. The 10th, his bowels had been freely opened, and as he had passed little or no urine it had been drawn off by catheter. His pulse had become more laborious, his breathing also; the dresser bled him to  $\text{℥vj}$ , and while in the act of blood-letting the pulse became much softer, and after the abstraction the pupils became dilated, though still inactive. Now I look upon this as a very favourable symptom. At twelve o'clock I saw him, and found him perfectly insensible; his pupils had again become contracted and inobedient to stimuli; his pulse was soft, though still labouring. On examining the head, I found a puffy tumour situated at the posterior inferior angle of the right parietal bone; I therefore, on reviewing the case, and taking the several points into consideration, that every thing had been done to relieve the symptoms and without avail, and as there was evidently a portion of bone depressed, quite sufficient to account for all the symptoms, and seeing that the symptoms if unrelieved would certainly prove fatal, and by operating I should give him the only chance that remained; notwithstanding all these unfavourable symptoms, I ordered him into the theatre. On cutting down on the part which was puffy, the pericranium was found separated from the skull to some extent by the effusion of bloody serum, and the depressed bone was brought into view; a small angle was removed with Hey's saw, and the depressed portion was raised by the elevator; a fracture was seen extending downwards towards the base of the skull, but still the fractured edges of the bone were not in complete apposition, as by means of this fissure slight overlapping was caused, although I was convinced that all existing pressure was removed. During the time of the operation, the patient moaned greatly when pressure was made on the part. After the operation the pupil contracted on the admission of light, satisfactorily showing that the cause of its former inobedience was removed. Sir A. Cooper saw him about an

hour after the operation, and thought the case hopeless. [Here the lecturer, seemingly as if fearing that he might for one moment have led his class to have considered less valuably than he did the opinion of Sir Astley, passed a high encomium on that great surgeon, by expressing a conviction, that if there was a point which placed Sir Astley higher in professional character than any other, it was his almost invariably just diagnosis; that he always seemed as if he could instinctively point out the measure of disease.] On the 11th, he appeared to know his father, seemed conscious of what was said to him, but could not speak; his pulse and breathing natural. 12th. Passed a restless night, tossing himself about and moaning; he was fastened down with straps. Pulse 98, soft and sharp. Enema colocynt was ordered, which had the desired effect; tongue moist. 13th. Restless night; much in the same state as on the previous evening; perfectly understood what was said to him, but could not speak. [Here Mr. Cooper alluded to the important researches of Dr. Foville, who considered that inability to speak depended on some lesion of the hippocampus major.] 15th. Considerably better; his countenance more calm; has attacks of restlessness only at times; has slight strabismus of the left eye, another proof of injury to the deeper parts of the brain, as from the experiments of Magendie it appears evident that strabismus did not occur unless the brain was injured to an extent beyond that the depression of parietal bone could produce. 16th. Still improving. 17th. Tongue clean and moist; could describe how the accident took place, in many parts of which he is correct. From this time till the 4th of August he gradually improved, when, from some irregularity of diet, he complained of pain in the head, restless nights, &c. &c., having frightful dreams; fancied he was going to ride his master's horse for 1000 pounds; and from the researches of Dr. Foville, who has had immense opportunity of judging, from being attached to a lunatic asylum near Rouen, that false impressions depend on inflammation of the cortical portion of the brain, and sometimes its membranes, emp. lyttæ. nuchæ. applic., with cal. gr. ij. ext. hyoscam. gr. v. was ordered. Some doubt must exist in the mind of every surgeon as to the propriety of administering narcotics in disturbed function of the brain in any case, as every body is aware of the frequency of cerebral disturbance from the use of sedatives; but, as in this case, the compression being removed, I have attributed the symptoms rather to irritative fever, and ventured the trial of cal. and ext. hyoscam. although I intimated the probability of discontinuing it.

From that time to the present he has been gradually getting better, and he is now quite well, with this exception, that there are some small pieces of bone which have to exfoliate from the jaw, which is strongly united.

Since this case was written, the pieces of bone which I alluded to in the operation have come away, showing that what nature has done so quickly should not have been removed by operation.

## BLUE, OR ASIATIC CHOLERA.

### CASES TAKEN AT LA PITIÉ,

BY

ALEXANDER THOMSON, M.B.

ST. JOHN'S, CAMBRIDGE.

APRIL 15th, 1832.—Caroline Accer, ætat. 45, a sempstress, about four feet high, rather thin, with black hair, half turned gray, and a leucophlegmatic temperament, has been ill for three years, particularly in the intestines, of perpetual pain in them, chiefly in the right side, accompanied with very frequent attacks of diarrhœa; was seized six days back, without any previous symptoms of approaching illness, and after having slept well, on awaking in the morning with great nausea, soon followed by vomiting, which continued all that day, and has lasted ever since, whenever she has taken food or any thing into the stomach; the matter vomited consisting always of the ingesta, never of a watery fluid, and rarely of bile; has been constantly, since the commencement of the nausea, extremely cold, but never blue until yesterday; was seized, at the same time as with the nausea, with cramps in the hands, arms, feet, legs, and thighs, and in the chest; and has constantly suffered from them in the same parts equally in all the limbs, and ever since. Felt also, at the time of the supervention of the nausea, pain, with lacerations in the anterior third of the head, but particularly in the right frontal region, and has continued to suffer this pain unremittingly; felt no increase of her habitual diarrhœa until after she had been three days ill, when she commenced to have very numerous stools, consisting of a yellowish water, and has continued ever since to go frequently to stool; the matter having now taken the appearance of white soap-water. Has not made water since the increase of the diarrhœa. Was seized the day after the commencement of the increase of the diarrhœa with severe twisting pains of the abdomen generally, but particularly with acute and burning pain of the epigastrium. Had but poor nourishment previously to her attack, and since that has eaten nothing but *purée*, a pappy dish, made with pea flour, and some grease and water; and drank nothing but liquorice-root water, savoured with a little lemon juice. Suffered yesterday much uneasiness and burning heat in the epigastrium, but not in the limbs; then lost her appetite; had increased vomiting and diarrhœa, with ardent thirst, the matter vomited being yellow and watery, but not bitter. Commenced yesterday, after these symptoms, to

have the hands blue, and the fingers shrivelled and puckered, particularly in the pulps. Was brought last night into the hospital, and has, as yet, had nothing done for her.

Eight A.M. She slept a little last night without dreaming; is now very uneasy and restless; lies coiled up on the left side, with the knees drawn upwards, as the easiest position; has no pains in the abdomen, except on pressure, and then particularly in the whole of the right side. Does not at present suffer in the head, but has much thirst, with a bad taste in the mouth. Has vomiting, and goes to stool incessantly; the matter dejected and vomited both resembling whey ill-strained from a broken mass of curds. Is much troubled with eructations, chiefly of air; makes no water; the whole body remarkably cold, but particularly the feet, legs, hands, fore-arms, neck, head, and face, and, most of all, the nose and chin; the hands, arms, face, forehead, and lips, remarkably blue; the features all sunk; the superficial veins of the neck, including the external jugular, and of the hands and feet, considerably distended; eyes sunk and hollow, and with very little secretion in them; eyelids closed, swollen at the edges. The adnata veins much loaded with dark-coloured blood; pupils contractile, but dilated; schneiderian membrane very dry and cold; nostrils containing much down; mouth dry and cold in the inside; tongue swollen, wrinkled, deeply furrowed, and furred, whitish or bluish-white, except on the edges, where it is bluish-red. Pulse perfectly imperceptible at the wrists and in the brachial arteries; of the carotids, 120; three, and sometimes four pulsations for each inspiration, irregular, beating sometimes very rapidly, and at others giving two or three strong pulsations—on the whole very feeble, and as though from a nearly empty vessel; respiration hurried; expired air feeling cold to the hand. She was ordered to take a quack water called *eau de Roquette*, which was given away in great abundance as a specific, and which Mr. Velpeau was willing to try. *She was ordered to take three small tumblersful of this water during the day.* It was found, upon analysis, to contain a small quantity of sulphuric acid.

*To take between every two tumblersful a large table-spoonful of brandy punch.*  
*Total abstinence.*

Four P.M.—She has not had any sleep; is very restless; now lies extended flat on her back; has had much cramp in the feet, legs, and thighs, but none in the chest, arms, or hands. Has felt very cold since the last visit, but is now more comfortable, and rather warmer. Has vomited three times, but not copiously; has twice evacuated in the bed watery stools, which she has not been able to retain, but made no water; vomits, according to the *religieuse*, every time she takes either the drink or the water; and, certainly, vomited two minutes after I had given her a spoonful

of punch, to try if the stomach would sustain it; yet has great thirst, and a bad taste in the mouth. The feet, hands, lips, cheeks, and nose, icy cold, in spite of hot bottles having been applied to the feet; all these parts equally blue, except the cheeks and chin, which are equally coloured, but rather redder. All the large superficial veins of these parts, and of the neck, including the external jugular, still more remarkably distended; eye more sunk; eyelids still more swollen; cornea much distended; adnata vessels turgid with dark-coloured blood; adnata dry for the want of lachrymal secretion; nostrils dry in their lining membrane, with still more down in them; mouth cold, and yet not very moist in the interior; tongue more swollen, more thickly and extensively covered with white fur; hands much shrivelled; pulse equally imperceptible in the radial and brachial arteries, of the carotids 90, more regular, very small, compressible.

16th. Ten A.M.—She has not slept at all; is still in full possession of all her faculties; has had no cramps during the night or this morning, but severe tearing pains all over the abdomen, particularly in the epigastrium, which still continue, and are much increased upon pressure, but most so in the whole of the umbilical region, it being remarkably tender; has felt a burning sensation in the stomach and intestines since she has taken the punch, in consequence of which increased pains. Sinapisms were applied to her feet last night, and a blister upon the epigastrium. Lies at present on the side, first on one, then on the other, with the knees drawn up into the abdomen. Has not suffered much from her blister, but considerably from the sinapisms; yet the blister has risen well. Has had all night, and still has, a dull constant pain over the whole frontal region. Complains of the throat being dry and painful; has had, and still has, great thirst, but has been afraid to drink for fear of re-exciting the vomiting; cannot move without exciting a feeling of nausea; has not vomited spontaneously at all, but whenever and whatever she has taken into the stomach, the matter brought up being always whitish, like water, inodorous, and tasting to her like the eructated matter after an indigestion of soup. Has much eructation of wind, and a bad taste in her mouth, as though she had been eating sugar. Has had one involuntary dejection since the last report, but none during the night or this morning; has made no water; has felt remarkable coldness of the feet all night, in spite of the sinapisms and hot-water bottles; has had even some shivering, but does not feel cold at present. The face remarkable for being covered with *acneal* points, or flask-like bodies, coming out from the sebaceous follicles around the base of the growing hairs, and thence having the appearance of being covered with a crop of stumpy coarse bristly white hairs; still blue, and covered with manifest subcutaneous veins, distended, though not so much so; the same

being true of the hands, fore-arms, feet, and legs, although the veins of the hands and feet are more relatively swollen than before. Eyes three-fourths closed from fatigue, still more sunk; eyelids still much swollen at their edges, and with their veins much distended; adnata vessels still turgid; adnata, however, free from increased vascularity, and still dry from want of lachrymal secretion; cornea turgid, bright, and clear, but not sparkling or glittering; pupil contractile, and moderately open; nostrils extremely dry in their lining membrane, scarcely moved in respiration, and filled with down and dust; mouth dry, clammy, and cold to the touch internally; lips neither so blue nor so dry; tongue still more swollen, very deeply furred and white, but rather moister, and bluish-red along the edges; pulse at the wrist not so very small, but with excessively small pulsations, or rather undulations, scarcely to be felt, about 100, regular, compressible; of the carotids, equal in number, beating thrice for each inspiration, regular, full, incompressible, vibrating; superficial veins of the neck, particularly the external jugular, still remarkably distended; the hands and feet equally cold, and still puckered and shrivelled in the same manner; respiration quiet at present; was much interrupted last evening by sighing, but not so during the night.

*PRES. The same in every respect as yesterday.*

*FOOD. Total abstinence.*

Half past four P.M.—She says that she has slept ever since the last visit, but not with a profound sleep. The nurse says she has only been lethargic, but has not slept; has a lethargic look, and something unmeaning in her eye, although still possessing all her intelligence; has suffered no acute pain at all, but dull pains all over the abdomen, increased much by pressure in the epigastrium and in the umbilical region. Feels, since I have been speaking to her, a pain resembling a sensation of contraction on the crown of the head. Has had no thirst, but the mouth very dry; has the body now warm, nay, indeed, hot; the face hot, and the feet, hands, fore-arms, and legs, remarkably cold. Has not made water, nor been to stool, and has only vomited twice, both times after taking the acidified water, the whole of which was brought up the first time, and the half the second time. Has not yet perspired at all; feels the respiration very much embarrassed, and productive of acute and lancinating transient pains between the shoulders. The whole skin, where not blue, is yellowish and earthy-looking; the face, neck, eyelids, hands, and feet, are equally blue, and have their veins as much distended; the eyes not quite so much sunk; eyelids, however, equally swollen at the edges, and three-fourths closed, when she is not roused from the lethargy; adnata colourless and free from lubrication; cornea more turgid and duller; pupils contractile, but dilated; nostrils stuffed with particles of dust, wool,

and cotton; lips a little redder; tongue very dry, much more deeply furred with white fur, more purple on the edges, and equally swollen. Pulse of the wrist exceedingly small, though somewhat more decided in force, and resembling the ticking of a watch, about 100, regular, completely thread-like; of the carotids, equal in number, regular, full, strong, incompressible, vibratory, still beating thrice for each inspiration, most remarkable in the contrast it forms with that of the wrist. The sides of the chest are considerably heaved in the efforts at respiration, although there is little or no movement of the nostrils.

17th. Eleven A.M.—She has slept very little during the night, having been constantly disturbed by the acute cries of a child in the same ward labouring also under the re-active stage of cholera; is now lying extended flat upon the back; still preserves all her intelligence, is in better spirits, and does not feel so weak and depressed; has constantly dull pain all over the abdomen, and acute pains whenever she takes a strong inspiration; suffering now in every part of the abdomen very much on pressure; has had much cramp in the legs and feet only, but not in the thighs and superior limbs; has none, however, at present, nor any pain in the head, although she has suffered severe but not lancinating pains in it during the night, over a space of about six square inches in extent, on its vertical and central part; has ceased to have pain in the abdomen on inspiration; but now feels pain between the shoulders, consequent upon the same act; complains still that the punch burns her inside; has still a pain and dryness in the throat; and dryness in the mouth, though no longer any bad taste; has had no thirst during the night; has constantly retained the sensation of coldness of the feet and hands, and has not transpired at all; feels the hands now, however, warmer and more comfortable; has not vomited since the last visit, even after the drinks, but has had, and has considerable nausea and retching from time to time; has had no alvine evacuations, and has made water once, though in small quantity, this morning. The hands are now more natural in temperature, though still cool; the face, neck, hands, and feet are not so blue, their veins not so much swollen; the eyes not so much sunk, but with considerable gummy secretion about them; the eyelids less swollen; the pupil natural; the cornea not so turgid; the adnata vessels still full; the sight unimpaired and undisturbed; the lips not so dry and less swollen; the mouth dry; the tongue very dry, very deeply furred with whitish fur, less swollen, however, and less blue at the edges; the pulse of the wrist about 90, regular, four times as bulky as yesterday, but still very small, soft, and compressible; of the carotids equal in number, regular, full, pulsating four times for every inspiration, strong and incompressible. She is so much better, in most respects, that it is deemed probable that,

in spite of all the unfavourable circumstances, she may recover.

PRES.—*Entirely the same as yesterday, and to persevere in the use of the punch.*

FOOD.—*Perfect abstinence.*

18. Seven A.M. she has not slept much, but possesses her intelligence completely; says it is impossible to sleep, surrounded as she is by the cries of cramp and noise of vomiting; according to the nurse, has been lethargic, but has not slept at all; is still lying extended flat upon her back; has suffered, since the last visit, almost constant acute pains in the intestines, which she herself says are not colic pains, but are much increased whenever gas is discharged by the anus, or by eructation, and now slightly all over it by pressure, but not so much as yesterday; has had, during any momentary relief from the acute pains, constant dull pains all over the abdomen; has no suffering elsewhere, although she still feels slight embarrassment in respiration; feels extremely weak; has not transpired, but made water twice, once yesterday and once this morning; has not felt the coldness of the feet or hands, but found them, with the whole body, of a moderate and comfortable temperature; has had no stool, no vomiting, no nausea, no retching, no appetite, no thirst, no bad taste in the mouth; is still troubled with continual eructations of gas. According to the nurse, the arms and hands have been icy cold all night; the feet and hands are now both much warmer; very little blue, and with their veins much less swollen; the face is much more natural in hue, appearance, and temperature; the veins of the face and neck are no longer swollen; the eyes are not so haggard; the eyelids not swollen, and little or not at all blue, but entirely covering the eye, and only opened when the patient is firmly addressed with some abrupt question; eye surrounded with gummy secretion; adnata vessels not distended; pupil contractile and natural; mouth still dry inside; tongue precisely in the same state as before; the respiration a little more laborious; the pulse of the wrist about 98, regular, still small, though double the size of yesterday, soft and compressible; of the carotids equal in number, regular, but full, bounding and incompressible; she is not aware that the *Roquette* water has done her any harm, but says it has certainly done her no good, in which last idea all coincide.

PRES.—*Sinapisms again to the feet, knees, and interior of the thighs. Leave off the Roquette water and the punch. 20 leeches to the epigastrium. Two pints of tartaric acid lemonade as drink; syrup of white poppies, an ounce and a half, with four ounces of infusion of the melissa officinalis, to be taken in doses of a single table-spoonful from time to time.*

19. She died this morning at about seven A.M., having been remarkably cold ever since her last visit, having remained in almost ex-

actly the same state as when I left her, feeble, but preserving her intelligence, when aroused, to the very last, but having almost entirely lost her voice\*, and had the pulse absolutely imperceptible since 11 P.M. of yesterday,

*Opening of the body, twenty-six hours after death.*—Body externally natural, paler than usually in the parts that had been blue, but covered with a blue net-work, arising from the blueness of the blood in the greater superficial veins; not emaciated, but moderately plump and well made; with the abdomen sunk towards the spine; cornea turgid, by no means sunk, but dull; adnata vessels distended; adnata itself not more coloured than usually; pupil dilated; mouth pale in the interior; cellular tissue of the scalp and the pericranium not much injected; dura-matral covering of the brain more injected than usually in the fibrous lamina, strongly adherent to the cranium, and covered, on the calvarium being torn away, with numerous droplets of black blood, oozing from the lacerated vessels, with that of the spine, having the whole of its arachnoid lining minutely and abnormally injected with bluish-black blood; dura-matral covering of the spine, in the posterior half, thicker than naturally, and three times the thickness of the anterior half; the meningeal arteries absolutely gorged with black, perfectly fluid, limpid, homogeneous blood; but the concomitant veins quite empty and with oppressed sides, so as to be with difficulty traceable; the spinal veins of Breschet, and the spinal sinuses, exterior to the theca of the spinal marrow, remarkably turgid; between the two laminae of the arachnoid, both in the encephalon and spinal marrow, a small quantity of colourless limpid fluid, more indeed in the former than in the previous cases; free arachnoid, both of the cerebrum and cerebellum, remarkably opaque in many parts, here and there in small spots, not larger than the area of the transverse section of a pea, and of every magnitude from that to a pin's point, generally round, or tending to that form, and gradually dying away into the natural transparency of the membrane; the same membrane in the spine, in many places deprived over irregular patches, or flame-shaped streaks, particularly in the posterior columns of its natural transparency, but not absolutely opaque; between the arachnoid and the pia-mater in the brain, considerable quantity of translucent, slightly turbid, brownish-yellow, limpid fluid, fully as much in the cerebrum, particularly towards the superior part of the organ, and between the convolutions, as in the preceding cases, but not relatively so abundant in the cerebellum; in the spine, one ounce and a half of a perfectly si-

\* I have made no observations on the voice since her illness, because it has not changed since I have seen her; although it was infantile whispering, and as if in the distance; she was not aware, however, of its being different from her natural voice.

milar fluid similarly situated; the lateral ventricles, containing each about three drachms of a translucent, rather turbid, whitish-grey, limpid fluid; the pia-matral vessels not at first apparently full, or well supplied with blood, on account of the superficial veins passing towards the longitudinal and other sinuses, being all, without exception, flat, compressed, and destitute of blood, so as to be with difficulty traceable; but the cerebral and cerebellar arteries, that is, all the traceable branches, natural in size, but turgid with bluish-black, perfectly fluid, limpid blood; the veins of the interior of the ventricles, the *venæ galeni*, and the remainder of the veins of the *velum interpositum*, with the exception of the two principal veins of the *plexus choroides*, which were turgid with black fluid blood, empty or nearly so, and consequently compressed or flattened; the arteries of the spinal marrow containing very little blood, and chiefly empty; the pia-matral veins, however, of the spine universally gorged with black, liquid, limpid blood; those of the posterior column, however, more intensely so; the membranes removable from the cerebrum, cerebellum, and spinal axis, with remarkable facility, and without, in any way, deranging the superficies of the organ; the cortical substance universally, both on the external surface and in the cerebral ganglia, paler than normally, remarkably so in the cerebrum and cerebro-spinal axis, and less so in the cerebellum, more rosy or coloured, and certainly more injected with minute vessels than normally in the spinal marrow; the medullary substance every where, except in the spine, where it is normal in colour, rather destitute of blood, yielding indeed upon the surface of the slices extremely small droplets of black and fluid blood, but not renewing these, when once removed with the back of the scalpel; both kinds of substance remarkably natural in consistence, both in the encephalon and in the spinal marrow, except in the roots of the third pair of nerves, which were remarkably soft and unresisting; the pineal gland normal in form and colour, and containing small bluntly angular granules of a hard, sand-like, translucent, amber-coloured substance; the pituitary gland not examined. The cervical part of the eighth pair, the cervical ganglia, and connecting filaments of the sympathetic, the glosso-pharyngeal, the lingual, and the splanchnic nerves on both sides, with the semilunar ganglion, examined with great care, perfectly normal in appearance, as were also the principal branches of the brachial plexus; the great sciatic nerve and the principal branches of the crural nerve on the right side, those on the left not being examined, remarkable lacerability and glueyness of the muscular substance of the head, neck, thorax, abdomen, back, right thigh, and heart, the only parts examined in this respect, though less of these qualities in the substance of the heart than in the two preceding cases; abdomen and thorax having under the skin a considerable layer of fat, of a healthy colour and consistence,

in the former about half an inch, in the latter about a fourth of an inch in depth; omentum and mesentery also loaded with fat, the latter containing a layer of about one-fourth of an inch in thickness; the pericardium containing about two fluid drachms of a brownish-yellow, transparent, limpid fluid, opaque in the capsular parts, minutely and universally injected with bluish-black coloured blood, throughout the whole of its serous membrane, both in the cardiac and capsular portion, but most so in the former, around the heads of the great vessels, and on the diaphragmatic aspect of the heart, on which it was elevated from the organ it invests by numerous *petechiæ*, varying in size from that of the transverse section of a lint-seed to that of a garden pea, most numerous along the fat surrounding the coronary vessels, and occupying the diaphragmatic nitro-neutricular groove; the coronary veins not more than one-half dilated with fluid black blood; the heart natural in bulk, but flaccid; none of the cavities dilated, and all of them containing about an equal quantity of demi-fluid blood, homogeneous in colour and consistence, bluish-black, clotted, but pulpy, friable, and completely diffident beneath the slightest touch of the fingers; substance of the heart extremely lacerable, pale, and gluey; valves all healthy, lining membrane of the left ventricle only remarkably and minutely injected with dark-coloured blood, particularly over the *columnæ carneæ* of the valves; the *pleuræ*, pulmonary, costal, mediastinal, and diaphragmatic, minutely injected with bluish-black blood; the posterior third of the pulmonary and costal, but particularly of the latter, being elevated by numerous subjacent *petechiæ*, from the size of a lint-seed to that of the transverse section of a pea, but the diaphragmatic portion by far the most intensely, having on both sides of the chest considerable and flat masses of coagulable lymph thrown out between it and the muscle of the diaphragm, and also recently effused into the cavity, and already, in the latter case, commenced to be organized, particularly on the right side, by small vessels shooting from the pulmonary surface of the diaphragmatic portion; the inferior two-thirds of the whole costal and mediastinal portions of the *pleuræ* most intensely injected, and presenting many extremely tender and lacerable recent adhesions, traversed by numerous vessels, with the corresponding portions of the *pleura-pulmonalis*, which was covered over the whole of the lower lobe of the left lung, and over the posterior three-fourths of the lower lobe of the right lung, with recently effused laminae of coagulable lymph, from one-twentieth to one-fifteenth of an inch in thickness, in some places already connected by delicate vessels, carrying the dark-blue blood to the pulmonary *pleura*, and in others still free, these laminae serving every where, even when unorganized, as means of adhesion between the two adjacent surfaces of the *pleuræ*, which, in the spots where these membranes

were found, were remarkably dry, though not very moist elsewhere; the inferior lobe of the left lung adherent by delicate, recent vascular bands to the superior lobe; the whole of the lower lobe of the left lung, and the lowest third of the posterior, two-thirds of the lower lobe of the right of the natural hue of the spleen, and yet, in the third, or suppurative, stage of hepatization, when cut into solid, not crepitant, sinking in water, bluish red, presenting very numerous masses, varying in size from that of a pea to that of a walnut, surrounded on the surface of the section with irregular, wavy whitish, or buff-coloured margins, of about the fifteenth of an inch in thickness, and containing within these membranes a homogeneous, decomposed mass, destitute of organization, falling into pap beneath the slightest pressure of the fingers, and having a colour of cream thickened, and intimately mingled with a small quantity of red colouring matter, the wavy margins being tough, buff-coloured membranes, or rather membranous partitions, apparently formed only of condensed cellular tissue, with little blood in it, separating these gangrenous masses from the remainder of the hepatized portions, the remainder of the lower lobes oozing from the cut extremities of the bronchial tubes an extremely abundant, thick, dun-coloured, reddish froth, mixed with some black, liquid blood from the cut vessels; and from the larger bronchial tubes pure yellow purulent matter, coming, however, from their surfaces, and not from any ulcer or abscess that could be traced opening into them; the posterior two-thirds of the remainder of the lungs much gorged with dark-coloured blood, and stuffed with frothy, dirty, dun-coloured mucous fluid; the lining membrane of the larynx, trachea, and its branches, minutely injected with bluish-black blood, more so in the larynx than in the section or parts of the trachea, and in this chiefly in the posterior membrane and between the rings in its upper third, but gradually becoming more and more intense towards the bifurcation, and from thence into the large ramifications, particularly of the two lower lobes; the bronchial tubes all containing a considerable quantity of dirty, frothy, dun-coloured, mucous fluid; the whole substance of the lungs, in the parts not already mentioned as changed, slightly injected with blackish blood, and consequently of a bluish-red hue throughout. The peritoneum, both abdominal and intestinal, minutely injected with dark-coloured blood, universally, with the exception of the envelope of the spleen, which was normal in this respect, but most intensely over the whole surface of the diaphragm, where were effused beneath it several irregularly shaped flat patches of coagulable lymph, and the posterior half of which was closely attached by recent easily lacerable and vascular bands to the posterior round edge of the liver, the remainder of the investing membrane of the liver being considerably injected, and here

and there recently attached to the peritoneal investment of the diaphragm; next in intensity in the whole of the contents of the pelvis and in its investing membrane, but particularly in the covering and suspensory duplicatures of the uterus; after this in the portion of the ileum, coiled up in the umbilical region, in the whole of the mesentery, and lastly in the stomach. The lining membrane of the whole of the intestinal tube, from the pharynx to the anus inclusive, remarkably injected with bluish black blood, but most particularly and intensely in the base of the tongue, the glottis, the pharynx, the whole of the œsophagus, the stomach, over the whole of the great curvatural half, the duodenum, the jejunum, the three or four feet of the ileum lying coiled up in the umbilical region, the last foot and a half of the ileum and the rectum; the most intense injection being in the umbilical parts of the ileum, then in the last foot and a half of the same, then in the stomach, then in the rectum, and lastly in the duodenum and jejunum, there being no ecchymosis or petechiæ in this case; the scattered glands of Brunner, or the irruption of others, that is the small swelling elevations of the mucous membrane, round, elevated, yellow, opaque, or semi-opaque, destitute of vessels in the midst of the most intense injection, varying in size from one-thirtieth to one-fifteenth of an inch in diameter, sometimes having a depression in the centre, sometimes not, very numerous in the œsophagus, in the stomach, particularly in its great curvatural half and towards the pyloric end. In the duodenum, and in the lower third of the ileum, but most numerous and developed in the last foot and a half of the ileum and in the duodenum. The stomach flaccid, not above one-third distended, containing no air, but about eight fluid ounces of a translucent greenish fluid, mingled with a few white flakes, resembling albuminous flakes coagulated, and of a remarkably fœtid odour, having its mucous membrane remarkably lacerable, particularly in the pyloric third and in the whole of the great curvatural half, and more mammelated and thicker than normally in the former; the mucous membrane being equally lacerable in all the most injected parts of the intestinal canal. The duodenum and jejunum contracted, and containing but a small quantity of thickish, viscid, opaque, dirty-yellowish liquid; the ileum containing but a very small quantity of thickish, viscid, opaque, dirty greenish-grey, gruel-like fluid, but distended with air, and having the whole of its coats throughout remarkably thin; the cœcum containing a considerable quantity, that is, about two-thirds distended with an opaque dirty-greyish, gruel-like fetid liquid, and a little air; the upper half of the ascending colon, the remainder of the great intestine, and the rectum, contracted very much, containing no air, but one-fourth distended with a tolerably consistent viscid, brownish-yellow substance, resembling healthy but relaxed feculent matter; the parotid and submaxillary

glands, and the thyroid body remarkably destitute of blood, the two former being of a pale buff hue, or of a colour not unlike that of the cineritious substance of the brain; the latter being dry and spongy under the knife, and having a dirty-brownish amber hue. The liver adherent over almost the whole of its adjacent surface by recent, short, vascular, and extremely lacerable adhesions with the diaphragm; but particularly over the posterior blunt edge, gorged in the ramifications of the vena porta through its substance with black, homogeneous, fluid, limpid blood, extremely lacerable in its substance, of a dark reddish-brown hue, having liquid dark coloured bile in its small biliary ducts, staining their coats, but forming no incrustation on their sides, and in the round posterior edge, at the right blunt angle, a collection of 20 bodies, spherical, or nearly so in form, of about the bulk each of a coriander seed, or of one-tenth of an inch in diameter, hard, bony, dense, compact, solid throughout, invested with closely adherent transparent membranes, attached to the parenchyma by peduncles, apparently of cellular tissue, and lying surrounded by the granules of the liver; a few similar bodies being also scattered at great distances from one another through the same lobe. Gall-bladder completely distended, stained green, as well as the parts of the intestine in contact with it, containing about a fluid ounce and a half of thick, viscid, ropy, dark, bottle-green bile, of a heavy odour. The spleen larger than in any of the previous cases, but still smaller than normally, adherent over the upper half of its convex surface by old adhesive bands, resembling condensed cellular tissue, and having a few vessels filled with dark coloured blood, to the corresponding part of the diaphragm, remarkably destitute of blood, resembling lung in the first stage of inflammation, but not quite so bright-coloured, being rather pinkish-white, divided at its inferior edge into three lobules by two notches of the depth of three-fourths of an inch, and extremely lacerable in its substance. The pancreas healthy, but remarkably free from blood; the veins of the ovaries very tortuous and turgid; the uterus having its external surface depressed into moulds for the intestines, remarkably injected in its serous covering, indurated in its substance, crisping under the scalpel, and containing many cartilaginous depositions, but remarkably white and free from blood, having, however, its lining membrane, and that of the vagina, intensely injected, particularly towards the os tinæ, containing in its cavity a fluid with all the external characters of pus, and in its fundus an unattached clot of grumous blood, of about the bulk of a large garden pea. The aorta half distended with a homogeneous, black, fluid, limpid blood, without any clots, extremely injected in its external cellular sheath, not stained red in its lining membrane, containing towards its head a few cartilaginous plates, and some scattered here and

there in its abdominal portion. The mesenteric veins only half distended with blood; the mesenteric arteries about half distended with black fluid blood; the vena cavæ, and the vena porta, gorged with homogeneous, dark, black blood, in a homogeneous, pulpy, tremulous, diffluent clot. The cellular covering of the kidneys considerably injected; the kidneys themselves gorged with dark-bluish, black blood, particularly in the papillæ, and remarkably acerbic in their substance. The bladder empty, as also the ureters and pelvis of the kidneys, but containing a viscid, colourless, mucous fluid, spread thinly over their lining membranes, which were minutely injected, particularly round the urethral orifice of the bladder, and in the pelvis and ureters, elevated by numerous extremely small petechial spots.

The thorax and intestines were examined in the presence of M. Velpeau and others, and dissected by Mr. Murdock, his interne. The brain, spine, nerves, &c., were afterwards examined separately by myself, in the company of Mr. Steel, a Scotch medical student, studying at Paris.

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NOTES FROM THE INTERESTING  
LECTURES OF  
PROFESSOR MAGENDIE,  
ON CHOLERA.

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REVERTING to former statements regarding the peculiarities of the blood of cholera patients, Dr. Magendie, in his 5th lecture, notices the remarkable absence of serum, and compares the blood, as it generally appears when taken from the arm of a patient labouring under marked symptoms, to currant-jelly, instead of possessing the natural consistence. Its colour is dark, or, to speak with precision, "*rouge très-foncé avec apparence noir.*" Mixed with water, the latter is reddened, the intensity of the colour being lost; similar to what Dr. Magendie believes to take place in the most intense forms of apoplexy, where great compression of both hemispheres of the brain exists, the dark colour of the blood exists as well in the arteries as in the veins, in the algid stage of cholera. The blood is also more viscid, so as to adhere to the finger, and the term *syrupy* has, on this account, been employed. Has been unable to discover abnormal states of the blood when taken from patients labouring under milder forms of cholera; and the dark colour may not be so remarkable where a certain degree of cold only exists. Is certain from his own observations, that the change in the blood takes place "*successivement,*" and not suddenly; and is therefore disposed to believe, that the alterations are a consequence and not the cause of the disease.

A point regarding which the analyses of chymists seem to agree is, the absence of



fibrine. M. Lassaigue found only a fourteenth part of the natural quantity in the blood of a patient in the algid period. Dr. Thompson has given results pretty similar:—fibrine, in a state of health, 5.67; in cholera, 0.57. A difference in the quantity of albumen also takes place; being, in health, 10.79, while, in the intense form of cholera, it is only 7.34, in 100 parts. According to Dr. Thompson, the colouring matter is increased in cholera to a five-fold extent. Does not think that a change in the nature, or quality of the salts of the blood, takes place. The serous discharges which occur agree, according to M. Lassaigue, in their chemical properties, with the serum of the blood.

The experiments made by M. Magendie of injecting a fluid into the veins, resembling the serum, proved ultimately inefficacious, although the disease had, in some, been for a short time modified. Notices the experiment of Diffenbach of Berlin, who, in three cases, drew off the blood of cholera patients, and replaced it by the transfusion of blood from healthy persons; but this, which might have been justifiable, failed in every case.

The quantity of blood has been found to be so greatly diminished in cholera, that Dr. Magendie has, in some instances, not been able to collect more than from six to ten ounces after death; and the explanation of this, he thinks, to be found in the abundant serous discharges: \* so that the more copious and prolonged these discharges, the more fatal, in general, is the disease. He considers the dark colour of the blood in the veins and arteries, while respiration continues, not accounted for by any received physiological doctrine. It seems very strange that, although the blood of cholera patients will, when exposed to the air, or even when placed in a phial, assume a bright-red colour, it is not affected by the air in its passage through the lungs. All physiological views hitherto adopted, relative to the change of colour which the blood undergoes, ought to be modified. Bichat's chapter on the influence of dark blood, in his *Traité de la Vie, et de la Mort*, must be re-cast. Legallois, also, considered life as depending on the contact of arterial blood with the spinal marrow. These physiological hypotheses are proved to be groundless, by instances of hundreds of cholera patients surviving where, for days, the blood in the arteries had been dark.

According to Herman and others, a microscopic examination of the blood of cholera patients has shown that a change takes place in the forms of the globules; but, upon the whole, this has not been verified satisfactorily by other investigators.

\* Perhaps one of the circumstances remaining uninvestigated with respect to cholera, is the state of the blood where no serous discharge took place, though collapse had existed in an extreme degree.—Eds.

One of the important functions from which the physician may be able to draw advantages, exists in a patient labouring under this disease, viz. *pulmonary absorption*.

Regarding the alteration of the voice, (even complete aphonia occurs sometimes), it arises from the muscles of the larynx being incapable of performing their functions, and the danger is usually in proportion to the degree in which this symptom exists.

It is only when the cornea loses its transparency that vision becomes impaired. The hearing often remains good to the very last moment. We cannot speak so certainly respecting the taste, but there seems reason to suppose that it is little impaired. Dr. Magendie cannot speak as to the sense of smell. There is reason to suppose that, at least in the advanced stages, the sensibility of the skin is much modified.

It seems remarkable, that while some remain calm under a formidable attack, others should be in such a state of agitation as to resemble hydrophobic patients.

(To be continued.)

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## CLINICAL LECTURE

DELIVERED BY

DR. ELLIOTSON,

Monday, November 12th, 1832.

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### DISEASE OF THE UTERUS AND HEART.

GENTLEMEN,

I AM sorry to have kept you waiting, but it was no fault of mine. In Union-street, I got stuck, as I was coming down in my carriage, by a number of carts, which detained me full a quarter of an hour, and I was just on the point of getting out to walk, when the obstruction gave way. It is very difficult to keep time, especially when you have to come through so many narrow streets as you have in this part of the town.

To-day, gentlemen, I am going to speak of the case of a woman, who was admitted into this Hospital three weeks ago, with a fatal disease, which had so far advanced, that it was evident that she could not live long. She was fifty years of age, and said she had been ill two months; she had menstruated regularly till two months ago, when she was suddenly seized with violent

flooding, and has had, for three weeks, a large quantity of dark clotted blood continually passing through the vagina; with this affection she had pain in the loins, and a sense of weight in the hypogastrium, soon followed by great prostration of strength; she had also pain in the head. Now, observe, she said that she had been perfectly well until two months ago, when flooding suddenly came on, and continued for three weeks: this disease, as you will perceive, when the parts are brought in, must have been of much longer standing than this, and it is rather curious, that she should have menstruated up to that time; when she came in, she was very white and feeble; her pulse was full and jerking. The pain in the head most probably arose from loss of blood; this will also produce delirium, head-ache, and vertigo; and whenever there is great loss of blood, these symptoms may always be observed. If you find a person with these symptoms after profuse hæmorrhage, bleeding will make a bad matter worse. If you wish to study this subject further, I must refer you to Dr. Marshall Hall's work on the loss of blood. He was the first who pointed out a disease, to which children are liable, similar in appearance to acute hydrocephalus, that is to say, a disease of the arachnoid, but in which no inflammatory symptoms are present; and if you take blood, death is sure to occur, and many children's lives have been lost through this treatment; but, under the use of mild stimulants, such as beef-tea, ammonia, &c. &c., they generally quite recover. This woman's pain in her head, then, arose from excessive weakness, consequent to the loss of so much blood. She stated, that she was very stout before she was taken ill, which is only two months ago, but, at the time of her admission, was, on the contrary, very pale and thin; her pulse was quick and rather sharp; but, after the loss of so much blood, you must not depend upon the pulse, for it is sure to deceive you. When there is but little blood in the

system, the heart sends it out more easily, and thus produces the sharp or jerking pulse. On listening to the heart, it appeared to act powerfully; and seeing her so weak and exhausted, indeed, also finding the pulse firm and full, perhaps hardly to be called full, but rather jerking, I doubted whether there was organic disease of the heart or not. The heart will act powerfully when there is less blood in the system than natural, and you will find a firm pulse. On listening to the heart, a bellows sound was heard over the region of the left ventricle, which occurred at the moment of the contraction of the heart. Now, you will find it the case, nineteen times out of twenty, that the bellows sound takes place at the moment of contraction of the left ventricle. In all the patients now in the hospital, under my care, that have the bellows sound, it takes place at the moment of the stroke of the heart. I have only met with three or four cases in which this sound occurred after the pulse; although we frequently find another bellows sound take place in some part of the chest, after the pulse, with one that occurs as the blood passes from the left ventricle to the aorta.

I examined the woman *per vaginam*, and found the neck of the womb enlarged; the os uteri appeared healthy—that is, free from ulceration; but the neck appeared hard about its anterior part. I felt enough to show me that extensive disease was going on in that organ. I mentioned this circumstance to those who were going round with me, and I find it here noted down (*looking at the book*). Here are the parts, and you observe there is extensive disease of the womb, which has a large tumour growing at the posterior part of the fundus. Here is the opening of the urinary bladder; this, the opening of the intestine; and here, between them, is the mouth of the uterus: this of course is the front, and this the back of the uterus (*showing the preparation*). Upon opening the vagina, the os uteri is

found as it had appeared to me on examination; the neck was enlarged, but the os uteri was healthy; the whole of the uterus is very much enlarged and hardened, but the cavity is of its usual size. I have no doubt that this ulceration came on when the violent hemorrhage took place, and then it was that she was first attacked with it. Here is a deposit in the body of the womb, occupying nearly the whole of the superior part, the neck is not so much diseased, and most likely became secondarily affected; some parts of it, however, are indurated, having almost a cartilaginous structure. This is a very fine specimen of uterine disease. This circumscribed deposit, although of a scirrhus nature, is not so fibrous, or firm, as it would be were it really scirrhus. Now, *this* tumour, which is situated upon the posterior part of the fundus, is much firmer, and more like true scirrhus, being more fibrous; although we frequently find true scirrhus much more fibrous than this. When a part becomes of a very fibrous nature, you have agonizing pain; this woman scarcely had any pain until within a short time before her death. This deposit, no doubt, ultimately affected the neck. You perceive that it is much hardened, yet there is no substance deposited there but it is merely hardened, and the uterus has a whitish fibrous appearance when cut. We are continually perceiving substances deposited in the cavity of the womb, and likewise externally; and sometimes these depositions will remain quite harmless, and the patients will live without any inconvenience resulting from them. In this person I have no doubt that the deposits had been taking place for a long time. It is a deposition in the substance of the fundus of the uterus, and although she had tumour externally, and the neck indurated, yet she suffered no pain until a short time before death. These tumours are something like a scirrhus, but that within less so than the external, which is harder, and cuts something like cartilage. The ulcer-

ation took place at the top, or ceiling, if I may so express it, of the uterus, so that the matter from it may pass down easier. When the ulceration is so extensive and malignant, and there is so much disease of the womb, we generally find the ovaries diseased. Here you observe there is great disease about the left ovary; here are what are called by some hydatids, but they are merely cysts filled with fluid, and you will observe the others filled in a similar manner.

Here is also another large fibrous tumour, situated amongst the broad ligaments; it is very hard, and most likely would soon have become real scirrhus. This encysted tumour evidently contains fluid (*pointing to another*). This ovary, the right one, is also diseased, and you can see small vesicles that are surrounding it. The heart is very soft, which is often the case after such debility. A sign of diseased heart is a bellows sound; but the bellows sound is not always the sign of diseased heart; it may happen from a variety of temporary causes, and it may be frequently noticed to follow great hemorrhage; therefore this bellows sound does not necessarily indicate any organic disease of the heart; sometimes it arises from hysteria; and, as I have before said, from a number of other causes. I knew a patient who had ascites, where the heart got pushed up, in some way or another, so as to cause bellows sound; she was afterwards tapped, when this symptom disappeared. The disease again returned, and with it the bellows sound. It also arises from the difficulty which the blood has in passing from the ventricle into the aorta. Most likely, in this woman's case, the blood could not find its way out of the heart so fast as the heart could impel it. The first day, suspecting that there might be something wrong, I examined her chest, and discovered a bellows sound, but did not then think that it arose from any organic disease of the heart, as it might arise from slight hypertrophy, dilatation, or various other causes;

but I thought it probable that the blood might not quite pass freely from the ventricle into the aorta. I did not take upon myself to assert that it arose from diseased aorta, but rather that it resulted from hypertrophy. This woman's heart does not appear particularly diseased, but is increased in substance, and larger than women's hearts generally are; and the cavity of the heart being increased in size, the aortic orifice does not appear large enough for the blood to pass freely through it. The blood being very thin, from the hæmorrhage which had occurred, it consequently contained fewer red particles, and became more watery, which rendered it much easier for the heart to impel it on.

With regard to the treatment, I merely attempted to alleviate her sufferings, but finding her so weak from the violent flooding, together with the extensive disease of the uterus when she came into the ward, I endeavoured to support her, and gave her opium when she was troubled with much pain; I therefore allowed her meat daily, with a pint of porter to make her comfortable. I had no idea of saving her, but merely kept her in the ward that I might be able to show you the specimen of the disease.

The hour, gentleman, has expired; and as I believe it is the time when Mr. Grainger's lecture commences, therefore, I will not detain you any longer, and so keep you from lecture.

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ROYAL COLLEGE OF SURGEONS,  
DUBLIN.

PROFESSOR HARRISON'S  
*INTRODUCTORY LECTURE*  
TO THE COURSE OF ANATOMY,

DELIVERED AT THE ROYAL COLLEGE OF  
SURGEONS, DUBLIN.

SESSION 1832—1833.

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THE medical session of this year commenced under the most favourable auspices. The spacious theatre of the

Royal College of Surgeons was completely filled, and was inadequate to afford accommodation to several persons. The Professor displayed his usual eloquence and power, and was listened to with profound attention. All the officers of the college, many of the most eminent of the profession here, and an immense number of students from all the schools in the metropolis, were present. It was an Introductory Lecture, highly instructive and exceedingly to the purpose. The proofs he advanced of the indispensable value of anatomy, not alone to the cultivation of medical science, but as forming a ground-work to a liberal and enlightened education, were clear and convincing. Its assistance to the philosopher, historian, antiquarian, poet, sculptor, and painter;—at the bar, on the stage, and in the pulpit, was illustrated with the happiest effect. He laid much stress upon the necessity of taking a comprehensive view of the subject, and showed the close connexion between the animal and vegetable kingdoms. He also pointed out their distinguishing characters, and the imperceptible gradation by which the one runs into the other, as in those low tribes of animals, the zoophytes, sponges, polypes, and corals, which were formerly classed with vegetables. He defined the properties of organic and inorganic matter, referring to the microscopical observations of Brown, Bateman, and others. After giving a minute analysis of vegetable life, and elucidating its relation to that of animal, in its vital, physical, and chemical properties, he detailed, with much accuracy, some very curious and beautiful analogies. The functions of circulation, respiration, and secretion, being established in plants, he went into a parity of reasoning, to prove the existence of a nervous system; and concluded by repeating some of the experiments of Deutrochet on organic tissues, which explained the ascent of the sap in trees, and threw considerable light on absorption, inflammation, and other vital phenomena.

THE

**London Medical & Surgical Journal.***Saturday, November 17, 1832.*

## ABUSES IN THE MEDICAL PROFESSION.

OUR exposure of the abuses in our profession has excited a great commotion among chemists and druggists, who not only assail us by innumerable epistolary communications, but even in the newspapers; while quacks, and their advocates, attack us in some of the minor publications, as will appear by the sequel. We are highly gratified to reflect that our honest endeavours to serve the public and the profession have succeeded beyond our expectations; and if the public press, as the grand corrector of all abuses, will aid us, the most invaluable benefits will accrue to the public, and to the profession to which we belong. The question we advocate is, the necessity of having proper medical attendance for the sick, and the suppression of empiricism in its varied ramifications. If health is the greatest temporal concern of every human being, its preservation must be of primary importance; and every philanthropist will aid us in our endeavours to ensure it to all classes of society. In all our remarks and arguments, we aim at serving the public and our profession; and in exposing abuses, we know we incur the displeasure of those whose conduct we censure. In the article complained of, we stated that chemists and druggists, who received no medical education, prescribed over

their counters, often visited the sick, compounded physicians' prescriptions, and superseded the regularly educated apothecaries. Every word of our statement is literally true, and cannot be denied. A correspondent defends this system, and argues, that his brother tradesmen are right, as it is their interest to do so. This reason is a very bad one; for it might as well be urged by the robber on the highway, who plunders for the sake of interest. If uneducated persons are competent to practise medicine, then away with universities, colleges, apothecaries' hall, and all medical institutions. We cannot assent to this doctrine; indeed one of our correspondents agrees with us, where he advocates the extermination of empiricism, in which he and his brethren must be included. His strictures on the impropriety of surgeon-apothecaries acting as retail druggists are unjust, because there is no injury to the public, nor to the fame of the profession by their so doing. They, as scientific men, may vend medicines with more safety than persons who have not received a medical education. It is not correct to say that the great body of chemists and druggists are men of superior literary attainments; the majority of them have no claim to such pretensions. Many of them are highly respectable men; but nine-tenths of them are ignorant of scientific chemistry, and are unable to decide whether delicate chemical medicines be genuine or not. They are respectable tradesmen, whose laudable object is to amass wealth; but they care not

whether their medicines produce good or no effects. Prescriptions are prepared by them in general; they are paid, and they have no interest at stake as to the efficacy of remedies. The reverse is the case with surgeon-apothecaries, who gain a livelihood by prescribing, and whose reputation will be injured unless their medicines prove efficacious. But they receive no fees; they are compelled to charge high for medicines, or, in fact, for their advice. What can be more unjust than to expect a qualified surgeon and apothecary to incur the awful responsibility of attending the sick, often at a great distance from his residence, to visit his patients at all hours and seasons, and to receive no more remuneration than the uneducated chemist and druggist, who have not expended a shilling, or an hour, in acquiring medical information? But far be it from us to defend the exorbitant sums charged for medicines, or the immense quantity of drugs, that is often sent in unnecessarily. The system is most injurious to the profession at large, as well as to the public; and is one of those defects, or abuses, to which we call attention. It has gone to such an extent, that the chemists and druggists have the compounding of all prescriptions, and families will sooner consult a physician or surgeon, pay the usual fee, and procure their medicines from those just named, than employ general practitioners. This might be obviated by medical men receiving small fees, and furnishing less medicine. This plan is adopted by many of the most

respectable practitioners in London, and in the country. Here we may observe that the junior physicians and surgeons of France will accept small fees of one, two, or three francs a visit, and are as affluent and respectable as their contemporaries in this kingdom.

We fully agree with a correspondent, whose letter will be found in this Number, that the monopoly of the Apothecaries' Society is unfair, and ought to be broken down; for this body charge 20 and 30 per cent. more than other druggists, and often for worse medicine; and ruin the general practitioners, by monopolizing most of the prescriptions ordered in the metropolis, and charging at least 50 per cent. more than smaller houses. But this body has one great claim to merit, which is, that the delicate chemical medicines are properly prepared in their establishment; and, therefore, a conscientious prescriber, whose object is the benefit of his patient, will recommend the Apothecaries' Hall as the best place for procuring these valuable remedies.

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#### MEDICO-LEGAL CONTROVERSY.

“Addidit et Longi non falsa pericula.”  
*Ovid. Met. Lib. iv. 787.*

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IN the last Number of the *Legal Examiner* will be found an editorial article, headed “Medical Controversy,” in which the writer not only defends his friend, St. John Long, but attacks the profession of medicine in general, and Dr. Ryan in particular, as hostile

to the hero of Harley-street, who is styled a second Galileo. We should decline noticing this article, had not charity induced us to remove the infirmity of its author, and to show his readers the consummate folly of Long's pretensions. If we save one of them from the danger of the empiric's nostrum, and also save his pocket, we shall not repent of writing this article.

We cannot enter into a controversy with an unprofessional opponent; and we think our worthy contemporary is extravagantly unreasonable in supposing that we, or any educated practitioner of medicine, will discuss a medical question with him, who belongs to a different profession. We should hesitate to call on him, through the pages of this Journal, to discuss an intricate question of law with us. But perhaps he is one of those pantologists, who can dispute "*de omni scibili*." We should say to him "*ne sutor ultra crepidam*." We beg to ask him a few questions *in limine*: Is he sure that his readers are as gullible as the defricated victims of his St. John? Is his vanity so sickly morbid as not to feel that he must be the laughing-stock of all the shrewd members of his profession, who witness his Quixotism in defending a system with which he is unacquainted? But we shall cure him of his "morbid condition of the humours," by ordinary means, and extract nothing from his head in the shape of quicksilver, as Lord Ingestrie has proved was extracted by Mr. Long. Here we must remark, parenthetically, that we should moustroously like to know which

of the heavy metals abounds in his Lordship's cranium. In treating our friend of the *Legal Examiner*, we shall apply a gentle stimulant, without any danger of *mortifying* him, after the manner of the unfortunate Miss Cashin, or the infatuated Mrs. Lloyd.

Our contemporary commences with an avowal that he writes with *prussic acid*, (save the mark!) and follows our profession in this one respect, viz.: "that they only administer deadly poisons to those who are overwhelmed with disease and wretchedness." We are unable to determine the import of this sentence, and cannot conclude whether it is meant in jest or earnest, but we incline to the latter inference, from the wonted "malice prepense" evinced by him towards our profession. We reply, that there is no truth in his accusation, and that poisons, a terrific word to the public, are, in proper doses, the most valuable of our remedies, and are indiscriminately administered to rich and poor, because disease is the same in both. Perhaps he will deny this, in imitation of his patron, who finds the rich the most valuable and gullible. Now, we inquire, why this attack upon the whole profession? We shall not follow his example, though we believe his profession much more deserving of censure than ours. There is one thing certain, that the medical faculty are not, in general, unprincipled men, who prostitute their talents for hire, who, by sophistry, technicality, blustering, insolence, and chicanery, attempt to prove that black is white, or attempt to arrive at conclusions

contrary to reason, justice, science, and common sense.

Our opponent next quotes a certificate, published in the *Ladies' Museum*, and no doubt handsomely paid for, it is as follows:—

“ We, the undersigned, having been patients of Mr. St. John Long, and having had his lotion applied to us, do declare, that no blisters were ever raised upon us by it, and that we never heard of its producing them upon any of his patients. That the irritation created by his lotion heals again under its daily application— That we have used the same to our faces, hands, and *other places*, and that it will produce a discharge on diseased parts, while it takes not the slightest effect on any other. Many of us have also held it in the mouth, and swallowed it with impunity. We have further to add, that we never knew an instance of mortification taking place under its use, and believe it almost impossible that such an effect could be produced by Mr. Long's lotion.”

“ We now contend, Sir, that as you have several times thought proper to indulge in abuse against Mr. Long, you are bound to answer the following question:—

“ What is the name of the lotion, or liquid, or substance, known to medical men, which will produce results exactly similar to the above?

“ We anxiously desire a direct and satisfactory answer to this question. But perhaps you will say, ‘ You are also too eminent an individual to notice this second piece of foolish nonsense of your sagacious contemporary.’ Be it so, Sir! and the world must then draw their own conclusions, and we must prove Mr. Long's discovery by evidence drawn from other sources.”

We are utterly astonished, that any lawyer in the kingdom would admit this certificate as evidence. It is offered by a set of silly noodles and crazy hypo-

chondriacs, who assert and believe the most ridiculous and absurd things, and who invariably look on their medical attendant, when he succeeds in removing their imaginary diseases, as a kind of supernatural being. Such persons are the *bores* of the Faculty; they suppose themselves labouring under several formidable diseases; they annoy any medical practitioner who has patience to listen to them, and who, at length, answers, that they have consumption, or liver complaint, &c., to get rid of them. They then fly to St. John Long, who promises a perfect cure in all diseases, by extracting the morbid humours from the head, back, or abdomen, as the case may be; and the mind once assured that a cure can be performed, the symptoms improve, a cure is effected, the patients sign a book that they are well, and that the first physicians had treated them in vain. Dupe after dupe arrives; the signature book is produced; my Lord Stult and Lady Affectation have added their autographs; the bait takes, and the quack succeeds. Such is the class of witnesses to the above certificate, and let us, who are no lawyers, cross-examine them. They assert, that Long's infallible lotion has been applied “ to their faces, hands, and *other places*; that it produces a discharge on diseased, but not on sound parts; that it does not blister; that the irritation created by it *heals* under its daily application.” The irritation heals! Did the sore on Miss Cushin's back, which was as large as a supper-plate, or the mould of a hat, as sworn at the in-



quest by half a dozen medical men of eminence, and barbarously rubbed with a coarse towel by Long—did this irritation heal by the daily application of the lotion? or did it not kill the miserable creature who had it, as it would a robust countryman? Was the destruction of the skin on the whole chest of Mrs. Lloyd a simple redness? and did it heal by the important and wonderful nostrum that produced it? Yet Lords Noodle and Doodle, with Ladies Silly and Ninny, “have known no instance of mortification having taken place, and believe it almost impossible (not quite, however,) that such an effect could be produced by Mr. Long’s lotion.” One word more on this document:—It is said, the lotion acts on diseased parts only. We were called, when Long was an outlaw for the effects of his innocent lotion on Miss Cashin, to witness the post-mortem examination of the body of a child between two and three years old, on which his nostrum had its unfavourable effect. Over the breast-bone was an eschar two inches long, and about half an inch in width. The child had belonged to one of the quack’s sincerest patrons. On opening the chest, the whole of the left lung adhered firmly to the ribs; it was studded with tubercles in every point; the right lung was tuberculous throughout; the spleen and mesentery diseased; and yet the nostrum acted only on the breast-bone, when it should have acted on every part of the body from head to foot, for all were diseased. We pledge our honour for the truth of this state-

ment, and can produce two other medical gentlemen to attest the fact. Now, friend of the Legal Examiner, what becomes of the certificate in the Ladies’ Museum, of the marvellous lotion, and of your simplicity in allowing yourself to be gulled? But you require a categorical answer to the question “What is Long’s nostrum, and what medicine can produce similar effects?” The fact above narrated shows that the lotion does not produce the effects ascribed to it; and as to the second part of your question, it is physically impossible that any medicine, or any combination of medicines, could act on the body in the manner alleged. Common sense ought to convince you, sir, that the human body is composed of different textures or tissues, each having a peculiar use, function, and disease, and each acted on by a certain class of medicines. To suppose that one remedy could remove all diseases, as Long pretends, is the greatest absurdity that ever entered the stupid head of an idiot or a fool. No, there are millions of diseases, and millions of remedies.

“Mille mali species, mille salutis erant.”

In conclusion, we beg to ask our contemporary a question, in return for his attention, and we demand a direct answer to it in his next number.

If Long can cure consumption, why did he call in Dr. Ramadge to cure himself of spitting of blood (the usual precursor of consumption), as announced in a late Sunday Times; and why is the unfortunate quack now obliged to reside at Brighton, to enjoy a more

temperate atmosphere than he could in London?

We call upon our contemporary, with the candour and fairness of a gentleman, to place our statements before his readers, and no longer to be the dupe of designing and unprincipled knaves.

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PROFESSOR ELLIOTSON'S  
LECTURES.

THE liberal spirit which breathed through every line of Professor Elliotson's Introductory Lecture at the London University, and which we eulogised in the strongest terms, excited the ire of that addle-pated imbecile, who ministers to the depraved taste of the corruptionists and pluralists in the medical profession. Nothing could be so perfect as the London medical schools; there was no need of a University or a King's College; both were vituperated week after week; the present teachers in London formed a great university, which was only equalled in the celestial empire; when, most unluckily for this visionary institution, Professor Elliotson had the unfeeling hardihood to demolish it as if by magic. The architect saw all his hopes vanish into thin air, and then turned round on their destroyer and grossly misrepresented him. This led the independent Professor to withdraw his support from a periodical which would have long since ceased to exist, had not his lectures appeared in it. But he now declines his sanction to the publication of his lectures, and is about to publish them himself in a correct and cheap form,

and thus seals the doom of the most stupid, partial, and unprincipled periodical that ever depreciated the medical literature of this country. The few who saw it admitted its invariable dullness and gross partiality; its mean subserviency to those in place and office; its suppression of truth, and its unprincipled and ungentlemanly personalities towards all who differed from it in opinion. We ask any candid man what can be baser than its malignant attack on Dr. Elliotson's lectures in the last Number.— Its revelation of editorial secrets, which no one of proper feeling would betray or divulge. Behold the gratitude of the man, whose Journal was entirely supported by the lectures which he now attempts to depreciate, while, at the same time, he avows his determination to continue their publication against the right of the owner!

“ Dr. Elliotson is evidently prepared to find his lectures inaccurate, and states that he has spent hours upon their correction. Those who know as much of the Doctor, and his compositions, as we do, will readily believe him. The fact is, he corrects and re-corrects the merest trifles, apparently striving to give to elaborate and studied lectures the appearance of being unpremeditated. The reader will find a fair specimen of his errata in our last Number, wherein two commas, in different parts of the lecture, are directed to be struck out, and the limb of a parenthesis (God save the mark!) transposed. We have, in truth, been most distressingly hampered by these puerilities,” &c.

“ ——— Absentem qui rodit amicam,  
Qui non defendit alio culpante, solutos  
Qui captat risus hominum, famamque dicacis;  
Fingere qui non visa potest, *commissa tacere*  
*Que nupit*, hic niger est, huic tu Romane  
caveto.”

THE  
EFFECTS OF TIC DOLOUREUX  
ON THE  
MAMMÆ AND TESTES.

BY S. HOOD, M.D. BRIGHTON.

THE first few cases of diseased testicle accompanying neuralgia of the sciatic nerves, I believe to be only an accidental circumstance; an opinion, which, I apprehend, is pretty generally entertained respecting cases of this description. In five out of eight consecutive cases of diseased testicle, with neuralgia of the sciatic nerves, this gland had become small and soft; while in the remaining three it was hard and enlarged. In cases of this kind the patient seldom complains of pain in the testicle, and is, indeed, generally quite unconscious of its being diseased. Recently a gentleman consulted me for tic douloureux of the left cheek and side of the head, which had recurred at intervals for seven years. After having detailed his sufferings, on being asked if there were any disease of the testicles, he congratulated himself, with much apparent satisfaction, on being "all sound there." Finding his assertion doubted, he submitted to an examination, when he discovered, to his mortification, the left testicle quite soft, and only about half its natural bulk. In every other respect this was a robust, healthy man, therefore the softening of the testicle could not be referred to constitutional debility; besides, in the course of a month, great mitigation of pain being procured, the testicle resumed its glandular structure, and very nearly its natural size. When the neuralgic attack is violent, it is probable that the testicle becomes sometimes affected at a very early period of the disease, for in one of the above-mentioned cases it was found lessened and soft on the tenth day of the disease. It is necessary, however, to add, that in this instance the sciatica was combined with the ilio scrotal neuralgia of Chaussier; but the

sub-carbonate of iron restored the testicle to its natural size and hardness in four days.

I have had no opportunity of ascertaining whether sciatic neuralgia causes any alteration of the mammæ in women; but the following inveterate case of tic doloureux, abridged from the patient's own statement, leads to a suspicion that they sometimes sympathise with neuralgia of the face:—

"I have head-aches of every description—sick, rheumatic, nervous, or what I call eye-aches, which are my eternal torment. Though the pain seems seated in the right eye, yet pressure on it sends a soreness and pain darting into my head, and extending all over this side of my head, face, teeth, gums, tongue, throat, and roof of my mouth, so that life is really a burthen. The veins of my brow swell like cords, and my eyes are red and inflamed, my stomach feels always sick, the retching is very violent, and often, though not always, do I bring off my stomach. These attacks last from three to six days, and nothing that I know can save me from an attack, or alleviate or shorten its duration. Before, after, and during the attack, the top of my head is as sore as it is possible to be, and there, as also wherever the pain had been, I feel an itching. The nostril is dry and stuffed, and the skin peels regularly off my lips. The symptoms of an approaching attack are generally the itchy soreness on the top of my head, itching and creeping about my face, coldness of my nose, and a teasing tickling in my throat; yet sometimes I have all these symptoms and escape, and at others I am attacked without any notice whatever. The causes of an attack are equally uncertain, that is, to my observation; I generally attribute it to cold, of which I am miserably susceptible; not that I feel cold readily, that I do not, but I think that I catch cold for a very trifle. I cannot go out of doors, I cannot bear a breath of air; it seems to me to be air, not cold, that hurts me. I cannot walk up and down the

room, or allow any one to pass and repass me, for the agitation of the air seems to *strike* my eye and temple; and this I feel be the weather warm or cold; more frequently, I think, in the former, for the weather must be cold indeed if I am not in some degree of perspiration. A cold in my head I never have; my feet, legs, and knees are the only places where I feel cold, and they are dreadfully so; let me do what I may, they are like ice; fire heat will scorch, but not warm them.

“ Till lately I fancied myself free from any fatal disease, but now I fear I have something the matter with my heart; I feel an uneasiness all about it, nor can I lie for any time on the left side; the pulsation is very irregular; at times it beats strong and quick, at other times it seems to stop altogether, which takes away my breath, and is followed by what I can hardly describe, a quick, gurgling noise at my heart, just as if a narrow-necked bottle of water were upset, when I feel suffocating, and have been so bad as to lay hold on the first thing within my reach to support myself; but I am not very well able to describe what I feel about my heart.

“ My health and even mind is in a wretched state; at times I feel so miserable, such a load, such an oppression on my mind, and compression in my head, such an inability to move, read, write, think, or, in fact, to do any thing, that I really fear I shall go distracted. My memory is gone; every thing, the most trivial, is a dreadful labour, a task, a something which I am afraid to undertake. The state of my mind is indeed as deplorable as my health, but to express the intensity of pain, which I generally endure, is quite impossible. I do not think I was ever so thin in my life, I am quite wasted away, and if I were to date the time when my health got so very bad, it would be in 1827, but if my memory serves me right, my ailment began as far back as 1817, and I think I caught it in a current

of air, while sitting between wet mats of scented grass.”

Several important symptoms are omitted in the above statement of this case, but it is sufficient for the object in view to mention only one of them. The left mamma was so nearly obliterated, that it was with difficulty a trace of it could be distinguished. Though this case has not been cured, yet one interval of a month, and another of six weeks, having occurred between the attacks, the left breast not only grew perceptibly, but became rather the largest of the two. This lady's washer-woman was also afflicted with *tic doloureux*, confined to the second branch of the fifth pair of nerves on the left side; her right breast is wasted, and lactation quite stopped.

In the case of a third female, whose left breast was wasted, and the milk very scanty in it, there was a violent neuralgic affection of the right brow. Another woman, who had no milk in her left breast, had been subject, for several years, to a violent pain on the top of her head; but, in this case, the function and natural size of the breast had not been restored with the removal of the pain. Although it appear a far fetched conclusion to attribute these alterations of glandular structure and function to neuralgia of a remote nerve, or branch of a nerve; yet it is not very probable, that so many cases of this kind should occur, fortuitously in succession. If these alterations occurred only after long suffering, and when constitutional debility is apparent, they might be referred to this cause; but they happen sometimes before any constitutional effect is produced. Again, the sudden re-construction of these glands, which often follow the removal or alleviation of neuralgia, would indicate that they are in some way implicated in the previous morbid action. On the other hand, it is certain, that even the cure of neuralgic affections does not invariably restore the natural structure of either the *mammæ* or *testes*.

## WESTMINSTER HOSPITAL.

EXTRACT FROM A LECTURE ON SURGERY, BY SIR ANTHONY CARLISLE.

MEDICINE A GAME OF WHIST.—EFFICACY OF BLISTER IN GOUT.

“THE practice of physic and surgery, gentlemen, may be compared to a game of whist. In order to play at whist, you are well aware it is necessary, first, to know the cards and the value of them, and secondly, to know the rules of the game. I suppose anatomy to be the first, and pathology and the theory of physic to be the second. If a person is well acquainted, then, with the value of the cards he holds, and understands thoroughly the rules of the game, he will always play a good game, however bad may be the cards dealt to him. It will sometimes be necessary to play trumps, as when in difficult cases you are forced to have recourse to extraordinary measures of treatment. But you will have a hundred ordinary games in which the common rules will serve your turn, and it will only be the hundred and first case, perhaps, that may be considered one of difficulty,—and in which your fortune may depend on a correct judgment.”

Sir A. Carlisle observed, in another part of his lecture, that he knew a gentleman, not in the profession, who, from drinking claret, was very subject to attacks of the gout in one of his feet. This gentleman, on every occasion when he was attacked, had the courage to apply a blister to the part, to “draw out the gout,” as he expressed it, along with the fluid effused. This practice always had the desired effect; it seemed to eradicate the gout, which would otherwise, most probably, have attacked the other foot likewise. Sir Anthony considered that the blister relieved the gout, by unloading the congested capillaries; for he considers congestion of the capillaries as constituting a considerable part of the proximate cause of inflammation.

## DEFENCE OF CHEMISTS.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

As a subscriber to your valuable Journal, and a chemist and druggist of some years' standing, I feel myself called upon individually (and I hope the trade will generally) to vindicate the character and respectability of our business from, what I consider, the very unjust and illiberal remarks you have thought proper, in your editorial wisdom, to assail us with, one and all, in your “leader” of last week. I refer, more particularly, to that part of it where you recommend, and call upon the Apothecaries' Company “to commence law proceedings against chemist, druggist, and *quack*,” thereby classifying us with the latter, which you are pleased afterwards to denominate “vermin.” I do not know exactly whether or not you consider us “vermin” also; at all events, it would have been highly creditable in you to call loudly on the press, as well as on the Apothecaries' Company, to commence proceedings against all empirics, who do in reality so largely injure and destroy the public health, to exterminate them altogether; they are literally a pest to society at large, and ought to be extinguished; but, surely, you do not soberly and candidly consider such ought to be the case with us? You ought, rather, to insist on the Apothecaries' Company to prosecute every man, as they can do, who sets up as a regular medical man, who never received a regular medical and surgical education, and thereby infringes so deeply on the regular profession. But is it not well known that these men also invade our rights, by vending drugs, &c. retail? and not only these, but also many of the surgeons and apothecaries are actually retail druggists, and, being licensed, may experiment and poison with impunity, as is well known to be the case, upon the poor devils whose ill fortune obliges them to be-

come subjects of the parish doctor, or hospital surgeon.

But, further, you seem to think, gentlemen, that a chemist and druggist, ought not to prescribe, and that he is a man of no medical education: I beg to differ from you again here; for I deem it to be his duty to practise and prescribe, as much as he possibly can, over his counter, and this, for the simple reason, for his own advantage and interest, as is the case with every person, who has been brought up, and follows his business in an honourable manner. And further, I assert, that the chemist and druggist of the present day (whatever deficiency their ancestors in the trade might have shown), although not strictly speaking medically educated, yet are men of liberal education, and many of very great merit and talent, and that in a medical point of view, and frequently also possessed of a good portion of sound scientific knowledge as well, and therefore are supported by the public as they deserve. And, with regard to your statement that they vend inferior chemicals and spurious or adulterated drugs, it may be so in some instances; but do not, at one fell swoop, deem us all so unprincipled, for I can assert that, generally speaking, druggists do sell and compound medicines quite as genuine as the precious Apothecaries' Hall, who, as a monopoly, are privileged to impose upon the foolish public a profit, over and above that which satisfies the respectable druggist, of from 20 to 30, or even 40, per cent! Out upon such gross impositions! and you ought to be the first to condemn such a monopoly, as one of the grossest medical abuses, and solicit the press to aid you in getting it reformed, for it is admitted, on all hands, that monopolies of any kind are injurious in a high degree to the public weal.

But enough, I trust, has been said in our defence to hope you will recant, or qualify your unjust remarks, and although, from not being in the habit of writing much, I have not been able

to condense my arguments, yet you will be able to understand me, and consider better and higher of us, I hope, than hitherto

I am, Gentlemen,  
Yours respectfully,  
CHEMICUS.

London. Nov. 7, 1832.

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EFFECTS OF MEDICINES INJECTED  
INTO THE BLADDER IN VARIOUS  
DISEASES.

*To the Editors of the London Medical and  
Surgical Journal.*

GENTLEMEN,  
SYMPTOMATIC tetanus, hydrophobia, and cancer, still continue intractable diseases, and the opprobrium of medical men. The varied forms of dropsy, a disease requiring in its treatment much practical acumen, often prove sources of disappointment under the most skilful and vigorous administration of remedies. The urinary bladder has not been duly employed, either in ancient or modern times, for conveying remedial agents to the system, when labouring under disease. Having experienced the uncertain operation of diuretics in hydroptic affections, when given through the stomach, I was induced to reflect on the connexion, established by means of the nervous system, among the viscera of the abdomen, and such a review led me to the conclusion that, in hydrothorax, ascites, and anasarca, the effects of the remedies usually administered by the mouth, such as the infusion of digitalis, genista, or senna, might be increased by liquids, containing similar properties, being thrown into the bladder, and to co-operate with medicines possessed of the same virtues, to be placed, in a solid state, in the rectum at suitable times. Such a suppository may be composed of a drachm of Castille soap, three grains of powdered digitalis, and half a drachm of supertartrate of potass. It assuredly would be justifiable to try the effects of the introduction of remedies, not only in dropsy but in

cholera, tetanus, and hydrophobia, as well as in cases of irritability of the stomach and intestines. Should an inflammatory disposition attend the hydropic disease, it will be proper, before the above treatment is had recourse to, to subdue it, as also to use due means for altering organic affection when it exists. The bowels should be opened, and the skin cleaned by the warm bath, as that condition of the surface which prepares it to take on the action of sudorifics, also predisposes the kidneys to be acted on by diuretics. In the recovery of persons apparently drowned, warm water thrown into the bladder may be useful. Through this viscus we may also be able to allay the activity of the kidneys in diabetes. An opinion prevails as to the retrograde action of the absorbents, between the stomach, the intestines, and the bladder; but I think that no such retrograde action takes place, as it is probable a class of absorbents, not yet described by anatomists, will be found to exist, the office of which is, to relieve the stomach and the intestines when overloaded, by conveying their contents to the bladder. When the urinary bladder is distended by the retention of its contents, I have no doubt that the sufferings of the patient are alleviated by the intervention of the lymphatic system. The law of absorption going on in the brain, supports this hypothesis, as well as cases of constipation of the bowels, which I have known to exist for weeks without any material inconvenience to the health of the individual, so that this *corps de reserve*, or something similar, must have been useful in breaking down the *fæces* and carrying them off, in an aqueous form, by means of the bladder. These opinions have been entertained for several years, and are now submitted, through your valuable Journal, to the profession at large.

I have the honour to be,

Gentlemen,

Your most obedient servant,

MEDICUS.

London. Nov. 12, 1832.

## Hospital Reports.

### GUY'S HOSPITAL.

LAST Tuesday three operations were performed by Mr. Key: the removal of a loose cartilage from the knee-joint; an amputation; and removal of an encysted tumour from the neck.

Nov. 6. Jane Hunt, 32, Mary's Ward, a fine, healthy young woman, about 19 years of age, was walking, about three months ago, in the street, when she suddenly felt something, on the inner side of the right knee-joint, which prevented her proceeding; and, on putting her hand to examine it, she perceived a small, hard tumour, which she had not noticed before: she hurt her knee about three years ago. Mr. Key removed the cartilage in the following way: by pulling the skin tight over the tumour, and making a semi-circular incision upon the side, when it readily escaped. Her leg was then placed on a splint to prevent the motion of the leg.

7. She had passed a disagreeable night; felt feverish; great pain in the knee.

8. Better; bowels open; tongue clean; not so much pain; doing well.

Margaret Money, *ætat.* 16, came into the Hospital under the care of Mr. Key, in Mary's Ward. She is a scrofulous looking girl, but has always enjoyed good health; she has a small, round, circumscribed tumour on the right side of the neck, resembling a gland; never had swelling of the like character before. On going into the theatre, Mr. Callaway and Mr. Cooper both examined the tumour, and disagreed as to what it was; Mr. Callaway being of the same opinion as Mr. Key, namely, that it was glandular; but Mr. Cooper differed from both, and gave it as his opinion that it was encysted. On the first incision the argument was settled in Mr. Cooper's favour, for a large quantity of a greenish yellow fluid escaped.

M. Key removed only part of the cyst, for it was attached to the jugular vein. A piece of lint was placed in the wound, and it was left to suppurate.

8. She is doing well; bowels open; tongue clear, &c. &c.

Agnes Shelley, 28, Christy's Ward, a sickly, delicate, young woman, æt. 23, was brought into the Hospital under Mr. Key; has a disease in the tarsal bones of the left foot, extending into the ankle-joint; she has been generally in bad health for some time, having attacks of intermittent fever. She has been ordered

*Mist. Camph. c. tinct. hyoscyami et liq. ammon. acet. ʒij. bis in die.*

The leg was removed in the usual way by the circular operation; the vessels secured, &c. &c.

7. Had passed a bad night; great pain in the stump, with starting; great pain in the head.

8. Rather better; slept a little at intervals; bowels open; not so much pain in the stump, &c. &c.

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#### CHOLERA IN NORWAY.

ALTHOUGH, as is well known, the most rigorous quarantine measures have been in force in Norway, the existence of cholera in Drammen and the port of Svelvik is officially declared. Other places in Norway are declared *suspected*. The accounts from Stockholm state very naively, that no body could tell how the disease *penetrated*. Simple people! Send Russell and Barry among them, and we will answer for this being soon made clear enough to every old woman in Sweden and Norway.

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#### A PARTICULAR EPIDEMIC DISEASE IN FRANÇHE COMTE.

FOR some weeks past, a disease has prevailed in several communes, which is considered to be a variety of *ergotisme*, and is attributed to an unusual

quantity of *Raphanistrum* in the rye crop of this year. The mortality hitherto has not been great, but recovery seems very slow and imperfect.

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#### THE MOTIVE BY WHICH THE ASSASSIN OF PROFESSOR DELPECH WAS INFLUENCED.

IN our last Number we gave an account of the assassination of Professor Delpech, of Montpellier. It now appears, that the person (Demptos) who shot M. Delpech, and afterwards destroyed himself, had been under the Professor's care for varicocele, and that atrophy of the testes was the consequence of the treatment he underwent. A report to this effect having reached the ears of a family in which Demptos was about to form an alliance, it seems they considered it proper to make certain inquiries, by writing to M. Delpech, whose answer having frustrated the views of Demptos, the latter, in despair, was driven to the commission of the horrid crime.

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#### MEDICO-BOTANICAL SOCIETY OF LONDON.

EARL STANHOPE, PRESIDENT, IN THE CHAIR.

#### EFFICACY OF MADAR IN NECROSIS.

THE first meeting of this Society took place on Tuesday, 13th instant, when a paper was read on the efficacy of several South American plants, transmitted by Dr. Hancock. It was impressively read by Dr. Sigmond, one of the secretaries, and was listened to with great attention.

The noble President eulogized the writer as one of the most zealous friends of the society, and acknowledged, in very laudatory terms, the many valuable contributions furnished by the scientific and learned author.

The noble Earl then read a communication from Mr. Twining, of Calcutta, in which two cases of caries with fistulæ were cured by the Madar powder.



Mr. Clendenning, the other Secretary, announced the titles of several presents which had been made to the society, by French, German, and Italian professors.

It was then determined, that the four professors of the society should lecture in turn:—Mr. Burnett, Professor of Botany at King's College and to the Society, the next meeting, November 27th, on the Algæ; Mr. Everitt, the Professor of Chemistry to the Society, on the preparations of Iodine and Hydriodate of Potass; Dr. Ryan, the Professor of Materia Medica, on the Medicinal Use of Iodine and its Preparations, on the succeeding night; and Dr. Clendenning, Professor of Toxicology, on the Injurious Effects of Iodine.

#### BOOKS.

A Lecture on the Nature, Causes, and Prevention of Cholera, delivered at Ashby-de-la-Zouch, and published at the request of the Board of Health. By JAMES M. S. KENNEDY, M.D. 8vo. pp. 36. London: Sherwood and Co.

A sensible, well-written, popular description of cholera.

A Description of the Appearances observed in a Case of Double Uterus, in which Impregnation had taken place, with Remarks on the Structure and Formation of the Membranes of the Human Ovum. By ROBERT LEE, M.D. F.R.S., Physician to the British Lying-in Hospital. (From the Medico-Chirurgical Transactions, vol. xvii.) 8vo. pp. 36. Two Plates.

A very interesting and curious essay.

The Principles and Practice of Obstetric Medicine, in a Series of Systematic Dissertations on Midwifery, and on the Diseases of Women and Children; illustrated by numerous plates. By D. D. DAVIS, M.D. M.R.S., and Professor of Midwifery in the University of London, &c. &c. Nos. XII. and XIII. 4to. Plates.

Medical Botany, or Illustrations and Descriptions of the Medicinal Plants of the London, Edinburgh, and Dublin Pharmacopœias, including a popular and scientific Account of Poisonous Vegetables indigenous to Great Britain, with Figures drawn and coloured from Nature. By JOHN STEPHENSON, M.D., and JAMES CHURCHILL, F.L.S. A new edition, by GILBERT T. BURNETT, F.L.S., Professor of Botany, King's College, and Medico-Botanical Society. No. 1. and II. 8vo. Plates.

This is really a new edition, greatly improved, enlarged, and published at less expense than the former edition.

#### NOTICES TO CORRESPONDENTS.

*Chemicus*.—The letter so signed reached us after our last Number was in type, and the writer is rather hasty. His communication will be found in another page, and is referred to in this day's leader.

*Philanthropos*.—The squib in *The Lancet*, on the secale cornutum and nitric acid, is pardonable. It certainly shows, we agree with our correspondent, how little our able contemporary thinks of the alleviation of human suffering. We opine, that if he had tooth-ache for an hour, he would change his tone.

*Justus* will see we have noticed the malignant attack upon Professor Elliotson.

*Dr. Hancock's* communication is under consideration.

*A Medical Elector*.—To be sure we should, and so ought every medical man to vote for Mr. Wakley. Editorial squabbles are a bagatelle. We are convinced he would aid medical reform in Parliament.

*Curioso*.—Dr. McLeod is the editor, and Dr. Cummin the sub-editor.—*Par nobile fratrum*.

*A Westminster Hospital Student*.—Sir Anthony Carlisle is a scientific and first-rate, though an eccentric surgeon. We gave the title of his lecture as sent us. He should not feel annoyed, for as senior surgeon to an hospital with 80 beds, an institution in which sound surgical knowledge is only taught, that we should illumine our readers with passing events. We trust the worthy Knight will not cease to lecture, as this would be whist indeed.

*Mr. Lambton*.—Foreign Lectures will not be allowed at the Royal College of Surgeons, and there must be a certificate showing that the candidate for examination has been engaged five years in the study of his profession.

APPEAL TO THE PROFESSION.—It is our painful and conscientious duty to state to our readers, that through unavoidable circumstances, an experienced, as well as talented medical gentleman of sterling integrity, is now so embarrassed in his affairs, that his family, consisting of a wife and six children, are even in want of the necessaries of life. We are accurately informed of the particulars, and do vouch for the truth of what we have stated; and we, therefore, appeal to the charitable disposition of our readers. The smallest donations will be gratefully received.

#### Subscriptions Received.

Rev. J. Bray, Hinckley, Leicestershire 10 10 0  
John Hamett, M.D. . . . . 5 0 0

#### NEW TRIAL REFUSED!!!

The members of the profession who consider the damages awarded in the case of Ramadge v. Ryan excessive, have commenced a subscription to enable the defendant to apply for a new trial, or defray his expenses.

Amount of subscriptions formerly announced . . . . . £.135 9 0  
Dr. Whiteman of Newcastle upon-Tyne 1 1 0

*Erratum*.—Page 461, line 16, for healthy, read bulky.

# London Medical and Surgical Journal.

No. 43.

SATURDAY, NOVEMBER 24, 1832.

VOL. II.

## LECTURES

ON THE

## PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

Delivered at the University of London,

SESSION 1832—1833,

BY

PROFESSOR SAMUEL COOPER.

LECTURE VIII., DELIVERED OCT. 18, 1832.

GENTLEMEN,

WHEN speaking of the topical treatment of inflammation, yesterday evening, I mentioned that this process is sometimes most benefited by cold applications, and sometimes by warm ones, without the difference of effect being always referable to any obvious principles. Some examples will also present themselves, in which a doubt will arise, whether cold or warm applications ought to be preferred. In such cases, there is one rule which will always hold good, and that is, to take the feelings of the patient as the criterion of what is best; for you may be sure, that the particular kind of application which seems most grateful to him, is that which will be most beneficial, and ought, therefore, to be preferred.

I also adverted to counter-irritation, as one means of lessening inflammation. Counter-irritation is useful on several principles, and the first is, by exciting an inflammatory action on the skin, either near to the seat of inflammation, or more or less distant from it, but in a situation which seems to sympathise with the part which we wish to relieve. In this practice we establish one inflammation for the relief of another, and we find that, in proportion as the second is excited, the first—the original disease—that which is the most dangerous, and that which we are, therefore, striving to subdue, declines. Counter-irritation affords us an illustration of what practitioners of the old schools called *derivation* or

*revulsion*, that is to say, of a process by which the blood or fluids are attracted or drawn from one part to another, either in its vicinity, or at some distance from it:—this, perhaps, is the true principle of the usefulness of counter-irritation. It is not always the wish of the surgeon to establish the counter-irritation very near the part affected, especially when the inflammation is acute; because if the two inflammations are not at a proper distance from each other, they may conjoin, as it were, and render the original disease worse than before. Hence, in inflammations of the eyes, we frequently apply a blister to the nape of the neck, rather than to the temples; because, if another inflammation were excited in a part so near the seat of the first, the eyelids would probably become inflamed, and the affection of the eye itself be rendered more violent, instead of being benefited. When the blister is applied too near the external commissure of the eyelids, we sometimes find that this is the case. It is, therefore, a rule not to put counter-irritating applications too near an inflamed part. There is also another reason why, in the instance I have mentioned, blisters are frequently applied to the nape of the neck, namely, there appears to be between that part of the integuments and the eyes a considerable degree of sympathy. But blisters act on another principle besides that of counter-irritation; they produce a copious discharge of serum from the surface of the cutis, whereby a great deal of good is accomplished; and, after the cuticle is removed, a discharge of pus may be kept up, as long as you please, by dressing the excoriated part with savine, or some other stimulating ointment.

Gentlemen, while I am upon this topic, let me advise you not to be too hasty in adopting counter-irritation; for, in all acute inflammations, if the practice of it be not duly preceded by depletion, it will be of no use, nay, sometimes it will have the contrary effect; it will do harm, by increasing, not only the inflammation itself, but the fever and restlessness. I may say, that, in such examples, counter-irritation, unpreceded by bleeding and purg-

ing, will never answer. There are various other plans in use for exciting and maintaining counter-irritation, such as *issues, setons*, and the *antimonial ointment*; all of these are occasionally employed. However, issues, setons, and the ointment of tartarized antimony, are employed principally in chronic inflammations, either when they have been chronic from their commencement, or have become so after the cessation of their acute form. The antimonial ointment is prepared by blending ℥j. of tartarized antimony with ℥j of hog's-lard; this is the preparation in common use. When rubbed on the skin, it has the effect of exciting pustules, and this pustular eruption may be kept up as long as you please, by repeating, from time to time, the friction with the ointment. As far as my own experience enables me to judge, I am of opinion, that blisters, setons, issues, and the antimonial ointment, should not be had recourse to until after depletion has been freely practised;—in fact, not until the inflammation has already received a powerful check from bleeding and other evacuations. However, in chronic inflammation, whether it be originally chronic, or has become so after the cessation of the acute form, blisters, antimonial ointment, issues, and setons, joined with occasional topical bleeding, are amongst our most efficient remedies. While on this subject, I must not omit to mention the benefit resulting from the external use of the nitrate of silver in some examples of inflammation, where such a result would never have been anticipated according to any ordinary train of reasoning. The fact was first brought into notice by Mr. Higginbottom of Nottingham. I have not only looked over his publication, but have put the practice, which he inculcates, to the test of experience, and often with good effects. As one instance, in which its efficacy is sometimes displayed, I may specify phlegmonous inflammation about the fingers, which, under other treatment, can hardly ever be prevented from advancing to suppuration, by which an abscess is formed, called, in this situation, *paronychia*, or *whitlow*. When the nitrate of silver is applied, so as to blacken the cuticle, it will succeed in dispersing inflammations of this description more frequently than you might expect. I have certainly seen it succeed in many instances. I do not, indeed, particularly understand the principle of its operation; but, when we have evidence of the utility of any particular mode of practice, the theory of its action must be held to be of secondary consideration. I have also seen the external use of the nitrate of silver successful in dispersing chronic enlargements of the glands of the neck in scrofulous persons. Do not imagine, gentlemen, that it will *always* answer, but it succeeds in preventing suppuration and bringing about resolution, in a sufficient number of cases to justify my recommendation of the trial of it. Sometimes it is only necessary to use it so as merely to darken the cuticle; in other instances, it must be employed so as to produce vesication.

Mr. Higginbottom's manner of applying it is this:—first, wash the surface, on which it is intended to apply it, with soap and water, then dry the part, and, having once more moistened it with a little cold water, pass the nitrate of silver over it twice or thrice, when your intention is merely to darken the skin, but, if you design to produce vesication, you must of course touch the part more frequently. Perhaps this practice may have been rather too much extolled, like the generality of other new things; but candour obliges me to acknowledge, that, in the trials, which I have made of it, in the description of cases specified, its efficacy has generally surpassed my expectations.

When inflammation has attacked a mucous membrane, and become chronic, counter-irritation in the neighbourhood will be of great service. In some of these cases, we use also cold astringent lotions. This is the most common plan of treatment. In purulent inflammation of the conjunctiva, particularly in the chronic stage of the disorder, it is customary to make use of astringent lotions, and, by this means, we rectify the wrong action of the vessels, which, in consequence of inflammation, have changed their natural secretion of mucus into one of purulent matter.

Another indication in inflammation, whether originally chronic, or become so subsequently to the acute form of the process, is to promote the absorption of the effused fluids, lymph, or other matters, by which the textures of parts are thickened or enlarged. These effusions and deposits are sometimes copious enough to obstruct the functions of the organ, and to occasion a considerable feeling of weakness and uneasiness to the patient. We must, therefore, endeavour to disperse them; and, for this purpose, blisters are amongst the most powerful agents, either kept open by means of savine ointment, or frequently renewed. With the same object in view, we occasionally make use of friction with mercurial or iodine ointment, or other applications calculated to excite absorption. We also, sometimes, prescribe brisk purgatives, which have a powerful effect in exciting the action of the absorbent system. To these methods must be added the internal use of mercury and iodine, which is well adapted to particular examples of inflammation. We make use, likewise, of certain lotions, which have the power of exciting absorption, and are termed *discutient*: most of these contain the muriate or acetate of ammonia, with camphorated spirits and vinegar.

Cold applications are not so powerful in dispersing chronic as acute inflammation; yet, by the occasional use of leeches and the effect of cold applications, it is generally believed, that chronic inflammation may be materially retarded. This, indeed, is a practice commonly pursued, though, where the indication is to bring about the absorption of effused fluid, lymph, or other deposited matter, I believe, counter-irritation, discutient lotions, and fric-

tion, with mercurial and iodine liniments, are more effective.

Gentlemen, in concluding the subject of the treatment of inflammation, I must explain, that specific inflammations require specific remedies, in addition to the measures prescribed for the common forms of the disorder: thus, gouty and rheumatic inflammations may be benefited by *colchicum*; scrofulous disease by the external and internal administration of iodine, or some other alteratives, adapted to change the nature of the morbid actions going on in the constitution; so, also, in venereal inflammations, it is generally right to use mercury. Yet, notwithstanding what I have just said, the cure of specific inflammations, as well as that of common inflammations, may frequently be promoted by ordinary antiphlogistic remedies, bleeding, leeches, purgatives, cold applications, &c.

Hitherto I have not mentioned the treatment of the symptomatic fever which accompanies acute inflammation: in fact, there is not much to be said respecting it, because, while we are taking measures to check and subdue the inflammation, we are adopting the most efficient plans for the relief of this fever, which is dependent upon the inflammation, and continues only while the inflammation itself lasts: in truth, it begins with it, and subsides with it, so that, as you cure the one, you cure the other. John Hunter called this fever an *universal sympathy of the constitution with the disturbed state of a part*. He distinguished two kinds of constitutional sympathy thus produced: the *first* is the one which we are considering, the *symp-tomatic, or sympathetic inflammatory fever*, which he considered as the *immediate* consequence of inflammatory action going on in any part of the body; the *second* is what is called *hectic fever*, which takes place later, after the local disease has existed some time, and is either difficult of cure or totally incurable. This latter kind of constitutional sympathy with a local injury, or disease, is different from that which constitutes the *inflammatory fever*, for it is characterized by weakness, whereas the latter is marked by strength. Gentlemen, this is what might be expected, because the inflammatory fever takes place early, before the system has been reduced by the disorder, or the requisite treatment. Deferring the consideration of hectic fever to another occasion, I will now confine my observations to the symptomatic inflammatory fever. The symptoms vary according to the nature of the inflammation and the functions of the organ or part affected, according to the constitution of the individual, and the extent and violence of the inflammation. The symptoms are generally of the following kind:—there is an increased action of the heart and of the whole arterial system, and the pulse, in a person otherwise healthy, if the inflammation be situated only in common parts, is frequent, full, and strong; there is an interruption and disorder of all the secretions; the skin is dry, the mouth

parched, and the patient annoyed by thirst, the saliva and mucus of the mouth and fauces being no longer secreted in their usual quantity and quality; and the tongue is mostly covered with a white fur. Gentlemen, the power of this fever in interrupting the secretion of the pus of ulcers and wounds is also very remarkable; for while the febrile disturbance is severe, the surfaces of ulcers and wounds continue dry, and do not secrete their ordinary quantity of pus, and, whatever small quantity may be poured out, is not of a healthy kind. The urine is also diminished in quantity; it is scanty and high-coloured, and does not deposit the lateritious sediment; that is to say, there is no deposition of uric acid until the fever declines. The secretions of the alimentary canal are diminished and altered in their nature, which may be one reason of the constipation attending the complaint; the temperature of the whole body is increased, and the nervous system is more or less disturbed, there being pain in the head, restlessness, and loss of sleep. In bad cases, and especially in nervous, irritable persons, you will sometimes observe twitches, or convulsive motions, of the tendons, called *subsultus tendinum*, and not unfrequently wandering of the mind, or actual *delirium*. The digestive functions are disturbed, the appetite being completely lost; and, in some instances, the patient is affected with nausea and sickness. With respect to the cure of this fever, I have not much to say, in addition to the observations already delivered on the treatment of inflammation: however, supposing mere headache or delirium existed, from determination of blood to the brain, you would not be afraid of applying leeches and cold applications to the head. So, if the stomach were greatly disturbed, you would not hesitate to use the means especially calculated to relieve such disorders. You would then, perhaps, administer, for example, saline effervescing draughts, with a few drops of laudanum or tincture of hyoscyamus in them; or apply fomentations to the epigastric region. But, gentlemen, if we except the necessity of paying attention to these, and other urgent symptoms and complications, we may say, that the cure of symptomatic inflammatory fever is comprehended in that of inflammation itself. For this reason, it must be unnecessary to detain you any longer on this part of practice.

Now, gentlemen, the next subject, to which I beg your attention, is one of considerable importance in surgery.—I mean that of *suppuration and abscesses*. Suppuration may be defined to be that process by which pus, a peculiar fluid so called, or the matter of sores, wounds, abscesses, and inflamed mucous membranes, is formed. This is generally considered one of the elementary subjects of surgery, numerous diseases being connected with suppuration in one way or another. The operation, or action, by which a purulent fluid is formed, is not confined to sores, wounds, and

abscesses; we see the process exemplified also in the production of purulent discharges from mucous membranes, which readily change their mode of action, and secrete pus instead of mucus. We see also the same power occasionally manifested in serous membranes, though much less frequently than in mucous membranes, because serous membranes are more prone to adhesive inflammation, or that kind of inflammatory action by which coagulating lymph is poured out; and it is only when the inflammation is above a certain degree of violence that pus is secreted by that texture. In the language of surgery, suppuration is called *one of the terminations of inflammation*; but, I have already explained, that this expression is incorrect; it would be more properly termed an *occasional consequence of inflammation*, than a *termination*, because when suppuration has begun, the inflammation does not terminate, but often continues in a violent degree. There is, indeed, a change in the action of the vessels, but by no means a cessation of inflammation. Like inflammation, the *suppurative process* is either *acute or chronic*; *simple or complicated* with specific morbid action, or with the lodgment of extraneous substances in the part affected. The acute form of suppuration we see exemplified in every case which is preceded by healthy inflammation, all whose processes take place quickly; if resolution is to happen, it soon occurs; if suppuration is to follow, it generally does so in a short time. We see the nature of acute suppuration displayed in every common whitlow; in every milk-abscess, and in all those abscesses which follow gun-shot wounds, severe compound fractures, and other bad mechanical injuries, as well as in several others complicated with specific disease, as is the case with venereal buboes. Of chronic suppuration, we have examples in the generality of scrofulous abscesses, and in all lumbar abscesses, which are, I believe, also scrofulous. The quiet and insidious manner, in which the matter of chronic abscesses frequently collects, is truly surprising. Some time ago, I was consulted by Mr. Gilbertson of Egham, and Mr. Baker of Staines, in the case of a young man who had an abscess in the epigastric region, containing three or four quarts of matter. Yet, notwithstanding this enormous collection of pus, the patient had never made any complaint till about three days before my visit; he had never even mentioned to his parents that there had been the least pain during the progress of the suppuration, nor had he discontinued his usual employments. The tumour pulsated as strongly as any aneurism of the aorta: indeed, it was for my opinion, whether the tumour was an aneurism or not, that I was consulted. As it was on the point of bursting, the question was an awful one to the patient; but several circumstances, which I will advert to when I speak of aneurism, led us to form a correct opinion of the

case. We find, then, that in one form of suppuration, there is often no heat nor pain in the part; so that doubts are sometimes raised as to the existence of inflammation as the precursor of it.

Gentlemen, suppuration is sometimes complicated with specific morbid action, as we see in scrofulous abscesses and also in venereal buboes. Suppuration takes place or is induced by a great variety of circumstances. It may depend on the *violence of the inflammatory action*, or on the *peculiar nature of the inflammation*, which may necessarily and invariably lead to suppuration. Thus, boils, carbuncles, and malignant pustules, always suppurate. Frequently suppuration is a consequence of the exposure of internal cavities or textures, as where the tunica vaginalis testis is laid open for the cure of hydrocele, or hæmatocele. Suppuration takes place in wounds not admitting of having their sides brought together, so that the textures continue exposed. In fact, if a wound be not closed, suppuration takes place as a matter of course. The exposure of internal cavities and textures, then, must be considered as one of the exciting causes of suppuration. Suppuration also necessarily attends or follows ulceration; every kind of sore illustrates this principle in the animal economy. In numerous instances, suppuration is produced on mucous membranes without ulceration. The vessels of these textures, as I have before observed, readily change their mode of action, when affected by inflammation, so as to pour out pus, instead of mucus. As an example of this truth, I may mention gonorrhœa, that is only a discharge of purulent matter from the urethra, which in its natural state secretes mucus, but when irritated, readily secretes pus. We find likewise suppuration occasionally, though much more rarely, taking place in close cavities, lined by serous membranes, and this likewise completely as the result of inflammation without ulceration. I need hardly mention *empyema* as affording an example of this fact. It was indeed, an instance of *empyema* which first led Mr. S. Sharp and Dr. William Hunter to conclude, that suppuration must be a secretion, and that it takes place without any breach of the solids. In the case which led them to this inference, although there was a copious quantity of pus in the cavity of the pleura, no ulceration could be detected at any point of that membrane; the decision was, therefore, natural enough, that suppuration must be a secretion. I have mentioned, that the lodgment of extraneous substances in parts is a common cause of suppuration. Thus, gentlemen, we often find splinters of wood, portions of dead bone, bullets, bits of broken glass, needles, pins, and other extraneous articles, giving rise to suppuration and abscesses. The term *abscess* is so common among surgeons, that you ought to have a correct idea of its meaning; it is only when purulent matter collects in the interior of parts or textures,

that the collection is named an abscess; when purulent matter is poured out from the surfaces of ulcers, or inflamed mucous membranes, it is called a *discharge*. Even the accumulations in the cavities of serous membranes are not always termed *abscesses*, but simply *collections*, or *effusions of pus*.

Gentlemen, as this is a convenient time for concluding the present lecture, I will now begin examinations; and here I must observe, that regular attendance on them will be of great importance in promoting your advancement in the knowledge of surgery, because, in the lectures, I recapitulate very little, as it is more convenient to do so in the examinations, in which the repetition of explanations admits of additional illustration, and, I believe, usually makes a greater impression on the mind. Examinations are also of material service, inasmuch as they prepare you for those in other places; and of one thing I am quite certain, that such gentlemen as attend them most regularly are most likely to gain the honours of this University at the end of the season.

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## CLINICAL LECTURES

ON

### HERNIA,

DELIVERED AT GUY'S HOSPITAL,

BY

BRANSBY B. COOPER, ESQ., F.R.S.

On Wednesday, October 14th, 1832.

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#### LECTURE III.

GENTLEMEN,

THE subject selected for this morning's lecture is hernia, and you will be better enabled to understand it from the anatomy of hernia being the purport of this morning's anatomical lecture. A hernia may be defined in the following way:—It is a protrusion of a viscus, or part of a viscus, from its natural cavity; thus we may have a hernia of each of the three great cavities of the body, such as hernia cerebri, a hernia of the lung, &c., and abdominal hernia; the latter is the one to which I would now more particularly direct your attention. The protrusion of any of the abdominal viscera through either or both of the rings is termed an inguinal hernia; but these displacements occur under such different circumstances, as to have led surgeons to have divided inguinal hernia into different species, naming them variously, partly in consequence of their direction, partly from their situation, and partly in reference to their relative position with the epigastric artery. If the hernia is situated within the inguinal canal and between the two rings, it is termed "a bubonocoele." If the hernia, besides taking the same course in the

direction of the cord, as the last described, passes through the external ring into the scrotum, it is termed scrotal, or oschocele; both of these are termed oblique inguinal hernia, and also external inguinal hernia, the neck of each being situated to the outer side of the epigastric artery. There is yet another species of inguinal hernia, which differs essentially from the oblique, from not passing through the internal ring, and from being placed to the inner side of the epigastric artery, on which account it is sometimes called internal inguinal hernia, or ventro-inguinal, from passing directly from the cavity of the abdomen through the internal ring; but more frequently direct inguinal hernia, in contradistinction to the oblique, from passing perfectly straight from the abdomen, and not taking the course of the cord. If the tumour in this hernia be large, it is difficult to tell it from oblique hernia, for the intestine meeting with least resistance outwards, the tumour appears to take an oblique direction; but should the intestine become strangulated, so as to render an operation necessary, one of the coverings, peculiar to this rupture, at once points out the nature of the disease. These are the common varieties of inguinal hernia, but the protrusion of part of the intestine through the abdominal rings are sometimes occurring under varieties which complicate the disease, both in relation to diagnosis and operation. For instance, it sometimes occurs that the tunica vaginalis is not closed at the internal ring, but that the cavity between the tunica vaginalis testis, and reflexa, remains open to the cavity of the peritoneum, in which case a portion of intestine may slip down into the vaginal cavity, without bringing with it any other hernial sac. This species of hernia is termed "congenital," but perhaps not always correctly, as it may be the tendency to, rather than the disease itself, which is to be considered congenital.

There are encysted hernia, and hernia with varieties of situation, with respect to the spermatic cord; circumstances which render the steps of the operation complicated, and call for great caution, on the part of the surgeon, to be prepared for any such varieties as may occur. The contents of the abdomen sometimes protrude from that cavity without passing through either of the abdominal rings, but slipping down behind Poupart's ligament into the thigh, form a tumour there, and is termed "femoral hernia," which may be known from inguinal by the surgeon placing his fore-finger upon the spinous process of the pubis on that side on which the hernia is situated, and if he be enabled to place the whole of the tumour on the outer side of his finger and spinous process of the pubis, it must be a femoral hernia; while, on the contrary, if he can place the whole extent of the swelling to the inner side of his finger, between the spine and symphysis pubis, it must then be inguinal, whether direct or oblique. A surgeon being called to a protrusion, in any of these situations, after having

heard the history of the case, as to the circumstances which produced it, and the duration of its descent, should immediately attempt to return it into the cavity of the abdomen, by performing such a manipulation as is termed the "taxis;" the direction of the application of this force differs essentially in the different species of hernia. In oblique inguinal hernia, the protruded intestine is directed upwards and outwards, in the course of the inguinal canal, towards the internal ring, and if it obeys this pressure, as the portion of intestine reaches the ring, it is to be pushed backwards into the abdomen. Now, in femoral hernia, in consequence of the tumour passing first downwards into the thigh, then forwards, and lastly upwards, to overlap Poupart's ligament, taking this circuitous course in consequence of there being least resistance in these directions, the taxis must be employed quite different to what it is in inguinal hernia. First, the tumour is to be passed downwards, from Poupart's ligament, into the thigh, and, when it has gained that situation, opposite to the fascia lata, it is to be pressed backwards into the femoral sheath, and lastly upwards, to be returned into the cavity of the abdomen: without attention to these rules, the application of the taxis may prove destructive instead of beneficial.

When a hernia is obedient to this taxis, it is termed reducible, and requires no further surgical treatment, but you must have recourse to mechanical means, "wearing a truss," and the patient ought to take a little aperient medicine. It sometimes, however, happens that the rupture cannot be reduced, although the bowels are still capable of performing their natural functions: such a hernia is termed irreducible, and may have acquired this state from several causes, either from the altered structure of the parts protruded, or of the aperture through which they passed being tied down by adhesive inflammation, as very frequently happens when intestine and omentum, together, are the contents of an irreducible hernia. The treatment, under these circumstances, can only be palliative. The surgeon should direct such means to be employed as will best defend the tumour from external injury, and enjoin his patient to pay strict attention to the state of his bowels, apprising him, at the same time, he may in a moment place his life in a state of jeopardy. The danger in these cases is, that the bowel may become obstructed or incarcerated (for I consider these terms synonymous, and distinct from strangulated hernia), without any fresh portion of intestine protruding; the bowel may become insuperably constipated, from the accumulation of feculent matter in the incarcerated portion, producing symptoms different from a strangulated hernia only from the comparative mildness of their effects and slowness of their progress. The means to be employed in these cases are purgative glysters, to empty the large intestines below the obstructed portion, and to give such purgatives as are most likely to produce the peristaltic

motion of the intestines, by which hopes may be entertained of the obstruction being removed; but should not these means be successful, an operation must be performed, similar to that required for strangulated hernia; the prognosis, however, being far more favourable. In such operations, the intestines should always, if possible, be returned into the cavity of the abdomen, or else you leave your patient in the same situation as he was before, subject to a recurrence of his complaint. The circumstances, however, rendering these hernia irreducible, sometimes are too complex to be overcome, or to admit of the intestine being returned into the abdomen.

A hernia is said to be *strangulated*, when a portion of intestine has, from the application of great muscular force, as in raising great weights, or from some such cause, slipped out of the cavity of the abdomen, through so narrow an opening as to be at once constricted. This sometimes happens from a fresh portion of intestine entering an old irreducible sac, rendering, indeed, the treatment and diagnosis of such cases difficult, namely, whether it is to be considered an obstructed or a strangulated hernia. The urgency of the symptoms, and more particularly the degree of tenderness of the sac, is the principal diagnostic mark.

In strangulated hernia, the symptoms are marked with more or less severity, depending upon the degree of constriction of the part protruded. The patient is at once struck with a pain at the scrobiculus cordis, as if a string was tightly placed round the body. Sickness soon follows; the pulse becomes small, quick, and hard, but generally regular; the extremities cold; the countenance anxious and pallid; the bowels constipated, and if means be attempted to relieve them by purgative medicines, they are ejected from the stomach, and constant vomiting and insuperable constipation will become the most urgent symptoms. The vomiting sometimes becomes what is termed *stercoraceous* or *feculent*; but I believe, that if it be true that the contents of the intestinal canal never become feculent till they pass into the large intestines, that vomiting never occurs, for it is a symptom never accompanying strangulation of large, but only of small intestine; so that if it did occur, the feculent matter would not only have to pass the valve of the colon, but also through the strictured intestine. The tumour is at first but little painful, and the skin is readily moved over its surface; it soon, however, becomes hard, red, and painful, and unless some means can be adopted for its relief, the death of the parts would occur.

If, when a surgeon is called to a patient suffering under these symptoms, and the tumour is very painful, I should say, it is always better to have recourse to bleeding, warm bath, and the application of cold to the tumour, before the operation is performed. The two first means are not only useful as far as they may lead to the reduction of the hernia, but if

they fail in this, they, at any rate, offer great advantages in preventing inflammatory action after the operation. While the application of cold, which I have seen frequently lead to the reduction of the strangulated intestine, after all other means have failed, produces its effects by diminishing the quantity of blood flowing to the tumour and the bulk of the contents of the intestine, and thus, by lessening the size, permits of its return into the abdomen. But if, after the application of these means, the taxis is still unsuccessful in reducing the hernia, the operation must be immediately recommended. It is well, however, here to remark, that during the application of the taxis, you should relax the muscles, raise the shoulders, draw the legs up, &c. &c.

There are some and excellent surgeons that recommend the tobacco enema. I must, for my own part, say, that I not only dread the immediate effects of that narcotic (which I have more than once seen prove fatal), but I also fear, if there be any tendency to prostration after the operation, that the tobacco might tend to diminish the powers of re-action.

Having taken this cursory view of the principle of hernia, I shall now state to you the particulars of the case chosen for clinical remarks, and describe the operation as performed by my colleague, Mr. Callaway.

#### THE CASE.

George Wallis, *ætat.* 45, a sailor, was admitted into Lazarus' Ward, Guy's Hospital, on the 2d Nov., with a strangulated scrotal hernia on the left side. He states, that he has had a rupture for fourteen years, which had always been reducible; that about four years ago, whilst "skylarking" on board his ship, the tumour became suddenly enlarged, but yet was capable of easy reduction into the cavity of the abdomen. He has constantly worn a truss until within a fortnight; when, on coming on shore, he broke it, and not being able to procure another, he has constantly been subject to protrusion of his hernia, and says, that he has not had a copious stool during that time. He was last night seized with great pain in the scrobiculus cordis, and vomiting, not being able to retain any thing on his stomach; and he attributes these symptoms to a fresh portion of intestine having descended, as he states the tumour had become suddenly larger; has had no motion these two days. A medical man was called in, who tried the taxis, and he was bled three times before he was admitted into Guy's Hospital. [Here Mr. Cooper made the following remark:—From the time that the truss had been left off, he appears to have allowed the hernia to be constantly down; and from the symptoms, namely, the trcpid state of the bowels, unaccompanied with any severer symptoms, it would lead me to believe, that, until last night, omentum alone had been the contents of the sac, when the sudden enlargement of the tumour was produced by the protrusion of a portion of intestine.]

On his admission into the Hospital, he had hiccup, nausea, and a slight degree of vomiting; his pulse 120, full, but compressible; countenance anxious; was very restless, and great thirst. The tumour was about the size of a duck's egg, and perfectly inobedient to the use of the taxis, which was again applied. An injection of castor oil and gruel was administered, which returned in ten minutes without bringing away any feculent matter with it. Ten o'clock P. M. Mr. Callaway saw the patient, and ordered the application of the ice mixture to the tumour, which had now become very tender; the hiccup was urgent and continued. Ordered,

R *Hyd. submur.* gr. iij.  
*Ert. opii*, gr. j. *sumend. statim.*

Six A.M. Hiccup continues, and has done during the night; vomiting has slightly returned, but the stomach appears to be quieted by the *cal. et opii*; countenance very anxious; great restlessness, with thirst; pulse rapid; abdomen tympanitic; ice was now again applied; had slept only ten minutes during the night.

Seven A.M. Mr. Callaway again saw him, and advised the immediate operation; the patient however refused, and could not be persuaded until half past one the same day, at which time the tenderness of the tumour had diminished; but, as all the other symptoms remained urgent, Mr. Callaway proceeded to the performance of the operation. The hair was shaved from the pubes; the incision was commenced at the upper part of the external ring, and continued downwards, through the integuments, nearly to the fundus of the tumour. The second incision was continued in the same direction and to the same extent, first through the superficial fascia, and then through the cremaster muscle, to expose the hernial sac. In this step of the operation, Mr. Callaway remarked upon the thickness of the covering; attributable perhaps, to the pressure of an inefficient truss. The sac was next laid open, with due observance of all those precautionary rules which, under this part of the operation, is safe in the hands of a skilful operator. When the sac was opened, a dark, sanious, coffee-coloured fluid escaped, and a large portion of indurated omentum, with its veins congested and much increased in size, was exposed to view, which Mr. Callaway raised, and underneath it a portion of deeply coloured small intestine. The operator now, in proceeding to divide the stricture, found difficulties which this peculiar case offered, namely, that not only the stricture was very small, but that it was also so adherent to the omentum as to render it impossible to separate them, and consequently the stricture was divided through the omentum, the hernial knife being obliged to be introduced, with the omentum intervening between its edge and the stricture. This step was completed, however, without hemorrhage, or any other un-



toward circumstances. The next object was to examine the state of the contents of the hernial sac, and to judge of the propriety of the return into the cavity of the abdomen. The intestine was the first object of investigation, and upon drawing a portion of it down, so as to observe the line of demarcation between the healthy and the strictured portion, a just appreciation could be formed of the injury sustained by the strangulation, and it was a subject of sufficient doubt in Mr. Callaway's mind as to lead him to consult with his colleagues, when they all agreed upon the propriety of returning it into the cavity of the abdomen: there still remained elasticity and evidence of life. The intestine was very readily returned, leaving the injured portion, as nearly as possible, to the abdominal ring. The omentum was next carefully examined and removed, first, because its structure was so altered it would, if left, probably, have acted as an extraneous substance; and secondly, that if left in the sac, it might, in case of the intestine sloughing, have prevented the free exit of its contents. In the excision of the omentum, little or no hæmorrhage occurred, from the blood, which filled its enlarged veins, being perfectly coagulated. During the operation, the patient continually hiccuped, and he was allowed to drink some wine and water, also some julep ammon. He was then placed in bed; and he immediately after expressed himself much relieved; and feeling cold, a little wine was administered, and directions were given that he should not be disturbed for two hours. Mr. Callaway ordered

*Mist. mag. c. mag. sulph.* ℥iiss.

should be taken directly.

Four P.M. Pulse 112 and jerking; hiccup still remains; countenance much less anxious; abdomen very tense.

Ten P.M. No pain; hiccup still remains, an urgent symptom; passed a large quantity of urine, and much flatus per anum; countenance improves; has vomited; both wine and draught were brought up; green tea was ordered, to allay the sickness; an enema of gruel and ol. ricini was ordered.

Nov. 4, A.M. Slept well; copious fluid stools, with some scybala; passed urine freely; hiccup unabated, attended with some nausea; otherwise all the symptoms are favourable; mustard poultice was applied to scrobiculis cordis for half an hour.

Four P.M. Cal. gr. v. statim enema commune, at five o'clock; the injection was returned in a few minutes afterwards, with a copious fluid evacuation; pulse 110; other symptoms remain the same.

*Hyd. submur.* gr. ij,  
*Opii*, gr. iss. statim.

5. Nine A.M. Slept four hours; had a copious stool, produced by an injection which was given an hour before; pulse rapid, and more jerking; no tenderness of the abdomen,

although it has a distended appearance, particularly in the epigastric region; hiccup remains; vomiting recurred.

*Mist. efferv. c. tinc. humuli quartis horis.*

6. Eight A.M. Hiccup still continues; restless night; pulse 100, jerking, but described as being compressible; no tenderness of the abdomen, although the distension of the epigastric region continues; tongue moist. Cal. gr. v.; an injection was given, also beef tea, and repeat the *mist. efferv.*, omit. t. humuli for the remainder of the day. The hiccup continues the most prominent and troublesome feature; the pulse in frequency and compressibility the same.

℞ *Hyd. submur.* gr. j;  
*Camphor.* gr. j;  
*Ext. opii*, gr. ss. statim. *emp. belladonnae scrob. cordis*,

to allay the hiccup, but this symptom produces great uneasiness; at eleven at night,

*Sp. ather. rect.* ℥ss.  
*Liq. opii sed.* ℥j v.  
*Mist. camph.* ℥iiss. statim.

7. Eight A.M. Hiccup still the same; passed a restless night, with some delirium and muttering; pulse quick, though soft; the wound was dressed, and looked healthy; a poultice was applied.

Eleven A.M. Hiccup much the same; the bowels being open, opium was still relied on as the best means of curing the distressing hiccup.

8. Great thirst; hiccup not so frequent; countenance anxious; pulse 120; sickness in the night, which was relieved by soda-water and brandy; bowels still regular. The vomiting and hiccup remained the urgent symptoms to the close of the scene; and although there was at times pain upon pressure of the abdomen, or suppression of any of the secretions, he gradually, hour by hour, lost his strength, and sunk on the 13th of Nov. at half-past nine o'clock in the morning.

Upon my going to the bed-side of the patient, I remarked upon the predominance of the hiccup as a symptom, and that I should infer from it that the omentum was sloughing, and kept up the convulsive action of the diaphragm, which proved to be the case upon the post-mortem examination, and which I shall now read.

*External appearances.*—He was a well-conditioned subject; the right patella had been fractured, and the two upper thirds were quite detached and lodged in the femur; the lowest third was on the head of the tibia; a membrane lined the inner surface of the former, containing synovia.

At the wound (of operation), which was on the left side, a small portion of omentum protruded in a sloughing state. On laying open the abdomen, the intestines presented themselves, very much distended, and on the surface were two or three clots of blood about

the size of peas. The omentum was much thickened and drawn down, its vessels being placed so longitudinally as to suggest the idea of muscle. A portion of it was firmly adherent to the mouth of the abdominal ring on the left side, in a sphacelated state, breaking down readily under pressure. Beneath this membrane was found a portion of ilium that had been incarcerated in the hernial sac in a blackened state, but not actually sphacelated. The intestines at this part were somewhat bound together by adhesions of recent formation, and on parting them, the peritoneal covering of the bowel was readily detached. On cutting into the intestines they were found to be distended with unhealthy watery fecal matter; the mucous membrane was much inflamed and corrugated, and of a dense port-wine colour. The intestines, in many parts, had the summit of their rugae denuded of mucous membrane, and fecal matter adhering to the ridges; in several parts patches of aggregate glands had ulcerated, and fecal matter was also firmly adherent. This state of the alimentary canal was continued throughout with the exception of the duodenum, but varied in colour from rose-colour to deep port-wine. There was no general peritoneal inflammation; the stomach was singularly small and contracted; there was healthy bile in the duodenum; the liver was large, and also the gall-bladder, its contents being thin and watery, but of a natural colour; spleen, kidneys, and pancreas natural; lungs were greatly affected on the right side with tubercles, but were free from adhesions to the pleura costalis; there was, however, considerable adhesion of recent formation between the lobes; the left lung was adherent, but except being slightly œdematous and presenting the rounded emphysematous edge, was not particularly unhealthy.

I shall detain you but a few moments longer, gentlemen. I wish to make one remark on the violent state of inflammation of the small intestines; it was peculiar that there were no symptoms pointing out that inflammatory action was going on in the bowels; they were regular; no pain on pressure, and the pulse generally compressible; hiccup, however, was incessant, on which I must make one remark. I remember hearing a Professor of medicine in Edinburgh, who was consulted upon the propriety of a farther bleeding in a case of peritonitis, say—"Yes, more blood may be taken from this patient; he will bear it; for he has hiccup, which, in my opinion, is a sign of action; only keep the patient sitting up while you take away the blood." The case before us seems to be rather in favour of this opinion, and makes it a subject well worthy of strict investigation, whether or not hiccup is an usual attendant of an increased action.

Nov. 20. Only one operation was performed to-day, and that was the removal of a breast by Mr. Cooper. By some it was supposed to be malignant—by others only chronic enlarge-

ment; but as it has grown rapidly within the last few days, Mr. C. thought proper to remove it.

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## CLINICAL LECTURE

DELIVERED BY

DR. ELLIOTSON.

AT ST. THOMAS'S HOSPITAL.

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### LECTURE IV.

GENTLEMEN,

At the last admission, several cases came into my wards, but none of them of any interest, therefore I shall not speak of them to-day. There were two of syphilis; these, however, most likely, were put in by mistake, for we frequently find patients, labouring under this disease, feign some other. Two, also, of rheumatism, one of erysipelas, one of bronchitis, and one of inflammatory pain of the head. I shall therefore proceed with those that were presented the previous week. The first that I shall speak of was one that terminated fatally. There have been only three deaths this season, two of which I spoke of in my last lecture. The case which has since proved fatal is one of cholera. Many gentlemen, I doubt, did not see this case, in consequence of its being removed to the cholera hospital; for some gentlemen that I invited to go appeared rather shy of doing so; but medical men must always face danger. The cholera hospital belonging to this institution is well worth seeing, as a piece of antiquity. It is said to be a water cottage belonging to Queen Elizabeth. In one of the rooms her arms are still to be seen upon the ceiling, which would make it appear that it did belong to her. I do not think this is generally known.

This was a case of genuine India cholera. He was not admitted with it, at least so far as we know; he came in the 25th October. He was eighteen years of age, and said that he had been ill two weeks; he appeared, then, to be labouring under continued fever; there was heat of the skin, quickness of pulse, heaviness of the eyes, great anxiety of countenance, excessive weakness, and great thirst; his tongue was red and glazed, covered by a black collection of sordes; so also were his teeth and gums. His pulse was very feeble, and he appeared altogether much debilitated. I immediately ordered his head to be shaved, and a cold lotion to be applied to it, on account of the heaviness and delirium. A blister was applied to the abdomen, on account of the tenderness there; had also a slight diarrhoea. There was a local affection of the head; it was very hot. These symptoms are common in fever. In the abdomen there was pain on pressure, both in the umbilical and epigastric regions, increased by pressure, and his bowels

were relaxed; so there appeared irritation of the mucous membrane of the intestines, and no doubt inflammation. On listening to the thorax, mucous and sonorous rale was heard distinctly, which we generally find in fever; so, in this man, you had an inflammatory complaint of the head, the chest, and the abdomen.

In fever, we find these commonly united. He was delirious, which showed the head was affected,—purged, and could not bear pressure, showing an inflammatory state of the abdomen. In the chest there was congestion of blood in the lungs, much cough and difficulty of breathing; therefore, you perceive, there were local symptoms of inflammation in all these parts. The pulse was as much as 117 in a minute. On account of his debility I ordered a pint of milk and a pint of beef tea. I did not order him more, for I was afraid to order him too much, on account of his inflammatory condition. It is very common for patients to be brought here with a low pulse, great weakness of body, without much heat of skin, and upon being placed in a warm bed, and having warm drink given them, become excited, and afterwards delirious, and altogether different from the sinking state in which they were admitted; consequently I was cautious in not giving things of a stimulating nature. Wishing, also, to put him upon the saline treatment, I ordered him some of the carbonate of soda and nitrate of potass; for it has been said of late, that putting the patients at first under this treatment would do away very much with the low symptoms of fever. Now, of this treatment I can give no opinion from my own experience, neither have I thought it right to give up old remedies that I have seen do good, for those which are new; but in cases where I have found ordinary measures fail, I will employ any remedy recommended which is rational. When we have the means of treating them successfully, I would not give up the old ones for the sake of experiment; nevertheless, I have no objection, in addition to my own remedies, to employ those which others say are useful.

This patient I put upon the saline treatment, namely, of carbonate of potass  $\mathcal{E}j$ . and the nitrate of potass gr. v. every three hours; nevertheless, I did not neglect other measures which I consider good treatment. The disease of the head was lessened by cold lotions. The next day his bowels became confined, therefore half an ounce of castor oil was given him. On the 25th October he came in, and on the 27th he became much worse; though I had not given him any wine, yet he became much excited. Dr. Roots, being at the hospital, saw him for me, and very properly ordered the beef tea and milk to be discontinued; had him cupped on the back of his head to ten ounces, and ordered five grains of the hydr. c. creta to be given every six hours; the most proper treatment, on account of the man being in an inflammatory condition. Dr. Roots also

ordered a mustard poultice to be applied to the epigastrium. This is the quickest method of producing irritation in acute complaints. It is best made by mixing the mustard up with warm water. The patient may not be able to bear it above three, ten, or twenty minutes; but, in some diseases, he can bear it much longer than in others. You must recollect that I ordered a blister to the epigastrium the first day; but, I believe, he, by some means or other, got it off in the night.

This man certainly laboured under continued fever; and all at once was taken with Asiatic cholera, which is a very striking circumstance that he was labouring under fever, when he was suddenly seized with cholera; symptoms of which were spasms in different parts of his body, violent vomiting and purging, of a thin whitish-brown appearance, with a number of white flakes in it; the pulse became very low, the ends of the fingers shrivelled and cold, eyes sunk, and a faint blueness pervaded the countenance. His fingers were shrivelled like a mummy, and he appeared in the greatest danger.

I have known cholera attack people when labouring under other complaints, but never saw one before attacked when labouring under fever. I recollect a patient here, that was labouring under phthisis, seized with this disease. It is very common for people, who are suffering from the bowel complaint, to be attacked; but, as I have before said, I never knew one attacked after continued fever, although, I have no doubt, others might have seen the same. The reason of this patient becoming attacked I cannot say, but I feel quite satisfied, from what I have seen, and what has been related to me by other medical men, that the disease is contagious, but I do not say that it cannot be excited without contagion; but I have seen several striking instances, that I can have no doubt, but that it sometimes occurs by contagion. I could mention, but I do not think it proper, many cases, that if the parties were not exposed to cholera, that is near patients suffering from the disease, they have been near those who have been able to communicate it. I have known several cases of persons going, from a place infected with cholera, home in the country, and then attacked with cholera, the neighbours about them have been seized, although no cholera had existed before that time in the place; and so many instances have been mentioned to me by others, that I have no doubt, one mode of producing cholera is by contagion.

The treatment of this man I will relate to you, and I believe it has been as successful as any thing yet adopted, but I do not think it has been sufficiently successful for me to recommend it. The treatment has not been very satisfactory, and I am quite sure, that if all the cholera patients, without a single exception, had been put into bed, and had every thing they wished for, and nothing more than cold water given them when they wished for cold

water, or warm beef tea when they wished for it, no more deaths would have occurred than has taken place; in fact, I think, not so many. It is a striking circumstance, that the man was under the influence of saline treatment up to the day of his being taken with cholera, and that is the treatment that has been most recommended in cholera. There was only one day, previous to his being attacked with cholera, that the saline medicine was omitted in consequence of the excitement. I certainly thought favourably of the saline, when it was first proposed, although I had no decided opinion; yet when I compared it to other modes, I had a good opinion of it. I saw as many patients recover under it as any other treatment, and I think rather more. I am always cautious in drawing inferences in medicine, because I know how easy it is to make a mistake. It struck me, that however successful the saline treatment might be, it was not fair to compare it with other modes of treatment; for a great number of the other plans I believe positively to be injurious; for instance, the exhibition of brandy and opium in large quantities, and the exhibition of other stimulants, I believe, according to Dr. Stevens's mode of saline treatment, all those things were omitted. His treatment embraced two points: in the first place, the exhibition of saline medicines; and, in the second, the exclusion of all other means; therefore, I think his treatment ought to be compared with the absence of all treatment. To judge of the efficacy of his treatment, we ought to have three sets of cases, one set treated with stimulants, another set treated with nothing at all, and the third set treated with saline medicines. I have now seen so many failures of the saline treatment, that I have not of late had recourse to it; and the treatment that I now adopt, and which has been adopted by friends on whom I could depend, is the following: I have omitted all stimulating medicines, such as brandy, and checked the vomiting by hydrocyanic acid, sometimes one drop every half hour; in some cases this dose has stopped it, in others a much larger has been required before it was checked. The effect of some narcotics will last for a day or more, but hydrocyanic acid will only last for a short time. Cullen, in speaking of laurel water, first pointed out this. If the acid should not remain upon the stomach the first time, you must repeat it the second, and so on until it does. I have tried to stop the purging by the sulphate of copper; it is a very strong astringent. I gave him gr.  $\frac{1}{2}$  every half hour. This medicine is not poisonous, only it irritates the alimentary canal. I knew one patient, who had chronic disease of the intestines, who took it for three years without any ill effect arising from it. It does not stop the purging so quickly as the hydrocyanic acid stops the vomiting; but after a certain time, the purging has declined, and at length ceased altogether. Now half a grain of this medicine was given to the man for nearly

forty-eight hours before the purging was sufficiently stopped; calomel also has been given of late. In this disease, the liver does not appear to secrete, at least we cannot observe bile in the stools; you generally see it in the first stool, for bile was already in the intestines when the disease commenced, but when this has passed out, then no more is secreted till the disease declines; there was bile found in the gall-bladder, but I presume that was there before. Calomel has been recommended of late with success; a grain or two has been given by some, and much larger doses by others. Immense doses of calomel may be given without producing vomiting or purging in this disease. Neither is any effect produced by the mouth, unless you continue it when the disease is on the decline. I give, in addition to this, prussic acid, in order to check the vomiting, and the sulphate of copper to stop the purging. I will not say whether calomel had better be given or not; but I think it is well ascertained that brandy and stimulants do harm; and I think you may give the patients as much cold water as they please. Many cases have been published of the success of cold water, and I must say I give credit to the whole of them. I have known patients in extreme collapse that had nothing given them but cold water, of which they drank half a pint at a time, and appeared to relish it better than any thing else: in some cases they have vomited it, and as soon as vomited wished for more. The patients have had intense thirst; some patients, you will find, are not thirsty, and will not take cold water; but when they are, and wish for it, let them have as much as they please. Then I have tried to stop the vomiting with hydrocyanic acid, check the purging by copper, given calomel, and let them take as much cold water and beef tea as they please. Although I have seen patients die under this treatment, I think it the best, much better than the stimulating treatment; but I have no doubt something hereafter will be discovered that is better. I have seen patients recover under it when they have been in extreme collapse. I have also applied heat to the feet. I have not tried mustard poultices; but I have seen patients recover, after the worst forms of the disease, with nothing but cold water and beef tea. Whether these would have got well or not, if they had taken nothing, I will not say, for I profess to be ignorant of the true mode of treating cholera. Since I last spoke of this subject, I have seen patients in collapse, who have had nothing but cold water, that recovered perfectly; a fact that has been ascertained, that hydrocyanic acid may be given, a minim or two every half hour, as long as the vomiting continues, and no depression is felt. Another ascertained fact is, that the sulphate of copper may be borne in a large quantity, viz., half a grain every half hour; perhaps more might be given, and check the diarrhoea sooner; but I have never given more than that. With respect to this

patient, he died; but you must recollect he laboured for two weeks under fever. I have known some patients get well of the cholera and die a short time afterwards of phthisis. This man's case was very unfavourable, for I may say he was at death's door when first admitted into the Hospital with fever. He suffered from this disease forty-eight hours, and took ten grains of calomel every half hour; consequently he took two ounces of calomel in that time, and forty-eight grains of the sulphate of copper in the same time! Before his death the vomiting ceased, the purging diminished, and from being in a state of collapse he became warm, and his pulse was good and full. Late on Thursday night he appeared doing well, and there was some suspicion that his gums were slightly affected. The calomel and copper were now given every four hours, instead of every half hour, and in the morning he died. Whether if the medicines had been continued he would have done well or not is a question. He was doing well while taking them every half hour; and then at seven o'clock in the morning, when only two doses had been given in nine hours, he died. This case is very interesting, on account of the large doses of the medicines he had taken.

The next case of which I shall speak, was one strikingly showing the use of the iodine. The patient was an Irishman, admitted with enlarged liver, which extended down as far as the anterior superior spinous process of the ilium. This immense enlargement of the liver appeared to arise from hard drinking. He told me he had taken large doses of whiskey and rum, sufficient to kill any man. I was so struck with the quantity that I made a note of it; it was a pint of whiskey and a pint of rum daily, besides a gallon of porter, and formerly much more. I endeavoured to remove this enlargement by rubbing in iodine. I had it rubbed all over the enlargement, night and morning, he also had the hydriodate of potass to take internally. He began with fifteen grains of the latter, three times a day; and one drachm of iodine was mixed with an ounce of grease. He took also calomel, and feeling disposed to vomit, I gave him hydrocyanic acid to take internally, two drops three times a day, which checked it. One drachm of iodine to one ounce of grease is a large quantity, and few can bear it. Half a drachm is as much as people can usually bear, and when you find the skin irritated, you must leave off rubbing, and not use it so strong on that individual. This man was admitted on the 11th of Oct. and went away of his own accord on the first of Nov. because he thought the liver would go away first if he staid here (*laughter*). His liver decreased so much in size and so fast, that he fancied he was going to have the liver rubbed out. The liver decreased so fast, that any one might perceive the diminution. I never saw such a rapid decrease of the liver in my life before. I presume it was owing to the friction of the iodine, rather than the hydriodate

of potass. I know the latter to be very useful in these cases, but never used it with such success as the former. When I use the ointment in conjunction with it, I think I have observed the diminution of size and induration go on more rapidly. Iodine, when given internally, frequently will not agree with the patient; in these cases I always give the hydriodate of potass, which is much better borne; you can give it to a much greater extent, than you can iodine. I gave this man two grains of calomel every night, a remedy which you will find act well with iodine. In this case, I imagine the benefit to result from the friction of iodine.

We have, at the present time, two other such cases in the wards of this Hospital; one of them is a man in William's Ward, whose liver has become much softer from this process; the other case is that of a woman in Mary Ward; the left lobe of the liver is much enlarged, but it has greatly diminished since she has used the iodine. I am quite satisfied that iodine is a very valuable remedy, and I do not think we are at present acquainted with the best mode of administering it; it may do harm in some cases. The influence of iodine is not, like the sulphate of copper, confined merely to the alimentary canal, because it comes in contact with it, but its effects are constitutional, and it will cause a general absorption of the body, so that you will find patients get thin while under its use. I never exhibit it unless I can see the patient frequently; and when I do see him I make a careful examination, ascertain that the appetite be good, whether there be any exhaustion, or if any unpleasant effect is produced by the medicine. If the patient feels any soreness or inconvenience from it, I lessen it, and sometimes I omit it altogether for a short time. If carefully observed, it is easily manageable, and I consider it a safe remedy. The only inconvenience I have found is, irritation produced on the skin by it; it may be injurious internally if you do not pay attention to it. It has been said, phthisis may be cured by this medicine, but I doubt whether it has any effect in that complaint.

The time, gentlemen, has elapsed, therefore I will mention simply the cases that were presented, viz.—four rheumatism, one acute dropsy, and a case of chronic gastritis in a woman, that perfectly recovered. Two cases of shamming, one of pain in the stomach, the other paralysis from lead. He stated that lead had been poured upon his shoulders, and that in rubbing it off, they had rubbed it in, and he pretended to have lost the use of his arms; but, however, a gentleman saw him raise his arms just like other people, in order to do something he wished. I was going to send him out, but he saved me the trouble by getting drunk, and being discharged by the steward.

NOTES FROM THE INTERESTING  
LECTURES OF  
PROFESSOR MAGENDIE,  
ON CHOLERA.

It has been frequently remarked, how the intellectual faculties have remained whole during attacks of cholera. This, indeed, has been found to be the case even when an attack has been so severe as to deprive the patient of the power of utterance, and when he has been obliged to express himself by signs.

In general, patients can move freely in bed, and help themselves to drinks, at least till near the fatal close of an attack; but they are incapable of movements of progression, so that, in severe forms, a person is at once struck down on the spot, and cannot move.

The very violent spasms in the muscles of the trunk and extremities, noticed so frequently in India, have been observed less frequently in Paris. Where they have occurred, under Dr. Magendie's observation, the cases have proved fatal.

Paralysis of certain muscles has been among the symptoms occasionally presenting themselves: sometimes the muscles of deglutition; frequently those of the voice. At other times the muscles of one side of the body have been paralysed, or those of an extremity only. In these cases he had been induced to suppose that cerebral hæmorrhage had taken place; but the autopsies did not discover a trace of such a thing.

An important modification noticed has been a state of adynamia during an attack, so great that the patients could with difficulty separate their eyelids or open their mouths, every other motion seeming to be out of their power.

"C'est un fait bien général que les fonctions génératrices, et tout ce qui tient au rapprochement des sexes, est singulièrement affaibli, non pas seulement chez les cholériques, mais chez tous les individus durant l'existence de l'épidémie cholérique."

Under the observation of Dr. Magendie, women with child recovered from attacks, though premature labour had taken place, or when, though at the full time, still-born children were produced. In those cases, Dr. Magendie considers the death of the fœtus not only attributable to the "influence cholérique" extending to the contents of the womb, but also to the circulation from the mother being so diminished.

Dr. Magendie seems to consider it established, that though in India the greatest number of deaths have been observed to take place in the algid stage, the greatest mortality has, in Europe, occurred in the period of re-action\*. Where death takes place

during the former stage, its approach is often not announced by any circumstance in particular; the patient may expire suddenly while expressing himself, or while in the act of drinking. Immediately preceding death, however, the respiration may become hurried. Accelerated respiration is a most fatal symptom. When, from 24 in a minute, the number of respirations arrives at 36 or 38, death is near at hand.

To what Dr. Magendie formerly stated, as to there being discovered, in the autopsies of those who died during the algid stage of cholera, no peculiar morbid states of parts, he would now merely add, that the spleen must be considered as unusually small; depending, no doubt, on the diminished volume of blood sent to this organ during the attack. He has, he states, been able, in his experiments on animals, to vary the size of the spleen by varying the volume of blood.

With respect to those lesions of structure in the ganglionic system, so much insisted upon by Delpech and others, as the cause from which the various phenomena of cholera arise, Dr. Magendie seems astonished that such statements should have been promulgated, as his examinations, made with the greatest care, have established "*intégrité parfaite*" of that system. However, the point of *functional* dérangement of the ganglionic system in cholera, may ultimately be set at rest, he says, that "the nervous system, particularly affected in cholera, presents no trace of lesion, whether we speak of the fluid with which it is surrounded, of its vessels, or its contecture: in no respect, whether as to consistence, colour, or general appearance, does any thing present itself to authorise our considering this as the seat of the disease."

Dr. Magendie points out the different modifications of the stage of re-action, the most promising being that which is well marked, so as sometimes to require venesection, and is accompanied by sweating. Another kind is where there is debility, with alternate changes from heat to cold, so that the re-action is incomplete. A third form has been called typhoid, though differing essentially from typhus. A fourth is where a state of adynamia supervenes, which may last for months. After the algid period, a peculiar pain, about the region of the heart and stomach, is sometimes observed to occur, which baffles the most energetic system of derivatives. In two cases (women), Dr. Magendie observed, succeeding to the cold period, a curious vibration of the fibres of every muscle of the body during three or four days. These terminated favourably.

The Professor would seem to prefer the word *transformation* to *re-action*, when speaking of the state succeeding to the algid period; as, in the greater number of cases, it is dissimilar to what is understood by the word re-action, the adynamic phenomena persisting. Along with the favourable signs, observed by many (as the renewal of the functions of the

\* This does not seem to be confirmed in London, by those who have paid great attention to the disease.—Eds.

kidneys, &c.), he notices the formation of intestinal gases, as indicated by borborygmi having a fetid odour. Has witnessed cases of prompt return to a state of health, the patient being able, after a free perspiration and sleep of a few hours, to rise with an appetite, and without any impression having been made by the attack on the digestive organs. Where, instead of perfect re-action, secondary algid states have supervened, has seen very few recoveries. Has seen three, and even four, different accessions of collapse in the same case. Thinks that where imperfect re-action takes place, the viscid moisture of the skin continuing, there is less chance of a fortunate issue, though warmth be restored, than even in the algid stage with this viscid exudation.

Venous congestions were found, on post mortem examinations, to have taken place in those cases of imperfect re-action; not, as before observed, states indicating that *inflammation* had existed.

Referring to the symptoms, approaching in some respects to typhus, Dr. Magendie observes, that the appearance of these symptoms caused, at one time, considerable alarm in Paris; as some physicians fancied, that, besides the cholera, another calamity afflicted that city. In this case, many more medical men might have been expected to be attacked, as was the case during the typhus of 1814, and especially in the Russian campaign, when so many fell victims. There is not, in cholera, that true cerebral congestion which we have in typhus; nor is there that kind of blood which characterizes the latter. Admits, that under him, as well as under others, few recoveries took place where the typhoid symptoms (liable, he thinks, to supervene under every treatment) had established themselves. The autopsies show that, in these cases, the intestinal canal is much more deeply coloured than where death takes place during the algid period: still, however, not in consequence of inflammation, but from the blood, so peculiar in its colour, being contained, in this case, in the arteries, as well as in the veins, of the intestines, and it may be made disappear completely simply by washing.

In the cases "*typhoides*," Dr. Magendie was at first induced to suppose that, from the degree in which the mental faculties were sometimes affected, the cerebral congestion must have been considerable; but autopsies proved that, in these cases, the morbid states bore no proportion to the symptoms; that the degree of congestion was inconsiderable, and by no means amounting to what has been observed in other diseases.

In his observations on the cephalo-spinal fluid (which he is in the habit of collecting by first opening the sacrum), Dr. Magendie states, that he has found it in undue quantity in two instances only.

In the transformation from the algid to the adynamic state, and during which the patient may remain for many days extended on the

bed, incapable of moving, and scarcely possessing power enough to open the mouth and swallow drinks, often do well, under great care, frictions, wine, &c.

From that most distressing form of re-action or transformation, in which long-continued pains in the epigastrium and region of the heart exist, together with vomiting, diarrhoea, and singultus, recovery will very rarely take place, under the most assiduous care. In these cases, a greater degree of redness of the intestines than in other forms, and an injected state of the vessels of the stomach, is always observed; the latter being, as Dr. Magendie seems disposed to consider, attributable to the long-continued vomiting.

(To be continued.)

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## REMINISCENCES

OF AN

ARMY MEDICAL OFFICER.

PART I. CHAPTER IV.

In the first chapter of these Records, Recollections, or Reminiscences, of this Autobiography--of these Memoirs, or *Memorabilia*,—and upon page 338 of the current volume of this Journal, I promised an allusion to the last public appearance of Professor Alexander Monro *secundus*. Upon that occasion, the venerable gentleman delivered a lecture at the distance of two or three feet from the place which the *Reminiscent* occupied; which, by the by, was in the front and lowest row of the theatre, exactly *behind* the lecturer.

I consider it to be neither injuring, nor even trifling with, our *juvenes ingenuosi*, if I attempt to depict the principal character in the performance. I am fond of what is graphic, though I may be no great dab at that sort of work myself.

He was, at this time, verging upon fourscore, a little hale man, in full possession of his faculties; generally walking from his residence in St. Andrew's-square to the college, a distance, perhaps, of three quarters of a mile; and the time allotted to him for lecturing, was from one until half past two, P.M.

The preceding session, however\*, he felt great annoyance from the manifested impatience of the students when two o'clock arrived, and found him still spinning the thread of his discourse; for, by this time, the Professor of Surgery out of doors (a rival recently set up by the College of Surgeons) had attracted a large class; many of whom were, in this simultaneous way, pupils *intra academiam, et etiam extra*. One day, in particular, when the demonstrations of impatience, and the agitation, or commotion, was more than usually vivid, the Professor gravely informed the audience "that he was not aware of any other lecture being delivered in the University at two o'clock." Certainly there was none, at least in the medical department; but it was affection to talk to the students in that style, because there were many eminent teachers *extra muros*, very popular and attractive; and also, because none but those who intended to graduate were under obligation to attend Dr. Monro's class; the Royal College of Surgeons having enacted, that the ticket of their own Professor † was valid for candidates who desired, and submitted to their examination, for a surgical diploma.

At the opening of the session of 1808-9, I heard as many introductory lectures as I could contrive to attend, not, however, with the view of choosing my instructors (an error, by the way, which has been too frequently committed by the young and inexperienced students of London), for all that affair had been previously arranged; but as a matter of philosophical curiosity.

Among other places, I therefore visited the anatomico-chirurgical theatre, which is a tall octagonal building, reputed capable of containing an auditory of about 1500 persons; lighted from the roof, and surrounded by a gallery, which, in my day, was no longer used; the sloping benches, of what may be

\* That during which, it may be remembered, I was his pupil.

† And that of Dr. Barclay, also.

called the pit, affording at least double the space which the diminished number of pupils required for their accommodation. At the appointed hour, Dr. Monro entered the arena, and stood (in a black gown) close to the revolving table, upon which nothing illustrative, or *ad vulgus captandum*, (as I have too frequently seen elsewhere) was displayed, and of which he made no use whatever. The son of his dissector (the celebrated Mr. Fyfe, author of the Compendium of Anatomy, &c., one of the best elementary, though not perhaps one of the most elegantly written, works in its department) sat close behind the Doctor, and next to myself.

During a full hour he discoursed, *con amore*, upon his favourite theme; recapitulating the order in which his son and colleague would go through the first, or anatomical part of the course, and the plan which he himself proposed to adopt in delivering the subsequent lectures on surgery. He stood the whole time; and when, at the end of the hour, he retired, I saw, from the correct stain made upon the flag which he had occupied, by the soles of his shoes, owing to the damp state, and the absorbent nature of the stone, that he had not lifted, or shifted heel, or toe, or swerved ever so little as a hair's breadth from the position which he had originally taken up. An instance of steadiness and of abstraction in the performance of such duty, which few men could have exhibited. For my own part, being somewhat experienced in similar performances, both theoretically and practically, I should approve of greater animation; but I give this as a reminiscence which has been preserved of Dr. Alexander Monro *secundus*. He never lectured again, though he lived several years after this period.

Now, perhaps, I may be permitted to remind the seniors, and inform the rising generation of the profession, that Edinburgh boasts of three Professors named Alexander Monro. The first (said to have been the greatest) is still spoken of and alluded to as



Monro *primus*. This was the author of the celebrated system of *osteology*, as well as of many other ingenious publications. His son, Alex. Monro *secundus*, succeeded him in the chair of anatomy and surgery, and made some contributions to anatomical and physiological knowledge, more particularly in the structure and economy of the brain. During his lifetime, "Young Sandy," the actual occupant of the paternal chair, was installed joint professor, with the assurance of succeeding in the event of his father's death or retirement. For some years after this arrangement was made, Dr. Monro junior (*tertius*), assisted by Mr. Fyfe, conducted the anatomical portion of the business, the father concluding the course by delivering about six weeks' lectures on surgery. Such was the state in which I found the elementary department of the medical school when I commenced my studies. I heard the last words of the second, if not *the greatest of the Alexanders*.

Although the reader has been duly served with notice as to my deliberate intention to digress (and that frequently) from the even tenour of my personal narration, I shall do my endeavour to avoid what might be considered downright, or barefaced, trifling. The opportunity, however, is too appropriate to omit some allusion to a peculiarity in the constitution of this celebrated school, which affects it generally, though more particularly in the medical department. Allusion has already been made to the influence of the Town Council, which (although composed of haberdashers and hosiers, grocers, whiskey-dealers, cabinet-makers, woollen-drapers, and *illius generis omnius, cum quibusdam aliis*) has, with the exception of a few appointments, either in the gift of the crown, or of particular founders, the power of bestowing vacant chairs. One consequence of this glaring absurdity has been, the practice of sons succeeding their fathers, and seldom, if ever, of a chair *digniori data*. Thus, the three Monros inherited the ana-

tomical; two Gregories have, in succession, adorned the practical; two Hamiltons have had the obstetric; Alison is Gregory's nephew; Home was assistant and successor to his father; two Andrew Ducans (father and son) figured at the same time; Hope, the chemist, was doubtless somewhat indebted to the circumstance of his uncle having held the chair of botany; the meritorious Christison is the son of the late Professor of Latin\*. Talent is not generally considered hereditary; but although the practice of putting sons in such responsible places, merely because their fathers were men of talent and reputation, or, perhaps, had it in their power to sway the decisions of a body of ignorant tradesmen, is much to be reprobated, and is known, in some instances, to have done the interests of the University of Edinburgh no good; it must be confessed, that those who are gifted with sufficient ability and inclination to avail themselves of the extraordinary advantages which the sons and domestic pupils of such men must have in their power, bid, at least, as fair as others, to become proper persons to be taken upon trust. I look upon it, however, that no professor is fit for duty until he has acquired some practical knowledge of the world, and attained to some degree of acquaintance with the character of mankind.

Ο μικρον.

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#### OBSERVATIONS ON THE TREATMENT OF CHOLERA.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

THE Medical Journals for some time past have so teemed with remarks on cholera, that a large portion of their readers are nauseated, and even look *blue* at the sight of the word; infallible remedies are every day pouring

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\* Was not Rutherford also an heir at job?

in upon us, but unfortunately the rate of mortality does not exhibit a corresponding decrease. Much valuable light has undoubtedly been thrown upon the subject, but the plans recommended are so various and opposite, that, on the first appearance of the disease in a locality, the practitioners are so confused, by the innumerable remedies that suggest themselves, that none are efficiently followed up. Nevertheless, having lately had extensive opportunities of watching and treating the disease, from its commencement to its close, I am induced to add a few remarks to those already before the public, which, if you think worthy a place in your valuable Journal, I shall be obliged by your inserting.

The awful state of collapse, into which cholera patients so rapidly sink, naturally suggests the use of stimulants, but I am fully convinced that they are decidedly inappropriate remedies; and, on referring to the experience of practical men, it is remarkable, that the remedies that have been extensively successful have no property in common except their sedative one. We may instance opium, calomel in large quantities, acetate of lead, cold water, nitrous acid, tartar emetic, &c. Opium, however, does not appear to be eminently successful, and, from the great uncertainty of its action, should be used with considerable caution: indeed, from the large quantities many patients take with little or no evident effect, whilst in others, apparently similarly circumstanced, its characteristic stupor is induced, even many hours after its use has been discontinued. In the latter cases, it is probable, that the absorbents are at first incapable of taking up the medicine, but that, after a time, they are excited to action, and the accumulated doses exert their full force upon the system. In the former cases, it is frequently ejected by vomiting before producing any effect.

The tartar emetic treatment is that in which I have had most experience, because the success that followed its exhibition was so evident, that my

colleague and myself were unwilling to risk the decided advantage it had in cases such as had previously resisted the stimulant, and calomel, and opium plans.

Our patients being persons under the influence of mental derangement, it was necessary to modify both the medicines and the manner of exhibiting them. This gave us an opportunity of judging of their relative efficacy, and the conclusion was, that the tartarized antimony was most efficacious when given in a dry state, and the longer the interval before vomiting, and the sooner it was checked altogether, the more rapid was the approach to convalescence. The dose was usually three grains, repeated every two hours, if the vomiting continued, sometimes combined with one grain of opium; and in both cases we found that the intervals between the vomiting were almost uniformly prolonged after taking the medicine, and it was very rarely necessary to give more than three doses. When the disease commenced by diarrhœa only, even of the rice-water character, a scruple each of rhubarb and magnesia were given, and repeated at intervals of two or three hours, with the addition of ʒss. of tinct. opii, if necessary. The dose seldom produced more than two or three stools, and more than three doses were never required for the cure. It was observed that the stools were never tinged by the rhubarb; but about the second day after its being taken, it was evident in the urine.

It has been remarked, and the belief has spread pretty wide, that when insane persons are attacked by cholera they become rational, and that as the disease declines their malady returns. I have attended more than forty patients, and in only one did this happen, and that was in a violent maniac, who became calm just as she would have done by any other cause that had suddenly depressed the vital powers. Some of the other patients were violent maniacs also, but they remained so with no abatement, ex-

cept that caused by the gradual decay of their corporeal energies.

There is a notion very prevalent, both among the profession and the public, that salivation is a security against the further progress of the disease, but I have seen both relapse and death occur whilst patients were in that state; but in the fatal cases death usually supervenes too soon after the commencement of treatment for that process to be established.

External heat is distressing to the patient; it is only useful to relieve extreme cold, and should be withdrawn as soon as that object is accomplished; but the body should be kept carefully covered to prevent the escape of the little heat that is generated by the natural process. The diet should be very sparing during the first few days of convalescence.

Organic diseases, particularly those of the chest, have their progress greatly accelerated, and require the most vigilant attention.

B.

#### ON THE USES OF THE AURICLES OF THE HEART.

AMONG the numerous writers on the circulation of the blood, none have assigned any uses to the auricles of the heart; most of them convey the impression, that the ventricles are dilated by the contractile power of the auricles, and some have even gone so far as to attribute the impulse of the heart against the side to this power. How it could ever have been thought possible for the feeble muscles of the auricle to antagonize the enormous power of the ventricle, it is difficult to conceive; and even if the possibility were admitted, it would be equally difficult to imagine what useful purpose would be answered by such an arrangement. My object in this paper is to point out what is the true action of these organs, and the very important office they sustain in the animal economy.

The blood in the venous system of vessels has always an impetus towards the heart, which is renewed at every contraction of the left, and every dilatation of the right ventricle; by which means, pressing, as it were, at one end of the stream, and drawing at the other, an almost uniform current is preserved, which flows into the auricle and distends it; the ventricle, in resuming its relaxed state, enlarges its cavity, and the reservoir of blood accumulated in the auricle rushes into the ventricle to supply the vacancy.

The uses of the auricles are—first, they prevent the too great distention of the veins during the diastole of the ventricles; secondly, they prevent the collapse of the great veins during the systole of the ventricles; thirdly, they provide a reservoir of blood for the succeeding action of the ventricles; and fourthly, they prevent the regurgitation that would be occasioned by the impetus that urges forward the current being turned back upon itself, which it would inevitably be, if an extensible reservoir were not provided to receive it. Thus the impetus, instead of aiding the circulation, would be an active agent in retarding it. When the succession and relation of these actions are regular, there is no pulsation in the veins; but when they are disturbed, this phenomenon is sometimes observed.

In the cold-blooded amphibia, the auricle is remarkably large, and a moment's consideration of their economy will show the necessity of this provision. When these animals plunge under water, breathing is suspended, and were all the blood in that case to pass through the lungs in its circuit, the consequence would probably prove fatal; but the blood is free to pass through, or to avoid the lungs, and no more passes through them, when the animal is under water, than suffices for their nutriment. Under these circumstances, the veins would suffer from the increased quantity of blood thrown into them, if the large size of the auricle did not prevent it.

The auricles do not allow of distention equally in all their dimensions, but form a pouch chiefly on one side of the current of blood; consequently much of their contained blood, being out of the direct current, might stagnate there, and even coagulate, as in the spontaneous cure for aneurism; it certainly would not arrive at the lungs in the uniform manner that it now does, if provision were not made for that purpose. I allude to the muscular fibres, which, it is remarkable, are confined to that portion of the auricle most remote from the main stream of the blood; probably, too, this structure is essential to the due admixture of the component parts of the blood, which is so amply provided for by rapid motion, which it is subjected to in every other part of the circulatory system.

Dr. Hope observes, that "the auricles contract so immediately before the ventricles, that one motion is propagated into the other, almost as if by continuity of action." That this should really take place, the relative strength of the two cavities renders physically impossible, the auricle could not contract faster than the ventricle dilated; but when we consider that this relation is between the interior of the cavities, and the great difference in the thickness of their walls, we can readily understand how contraction may be evident in the auricle before it is appreciable in the ventricle. But Dr. Hope remarks, "that in consequence of the percussion of the brain of the animal he experimented upon not being sufficiently smart, the action of the heart was more or less irregular, in consequence of which, he was enabled to make a very important discovery, viz. that the movements of the ventricles continued perfect, whilst the auricles were motionless." This completely overturns his theory, of the systole of the ventricles being induced by the "stimulus of the auricular contraction." According to the explanation given above, of the action of the auricles, it will readily be perceived how the conges-

tion occasioned by stunning an animal would so dilate the large veins as to supersede for the time the office of the auricles, whilst the auricle itself would be paralysed by the distending force of the accumulated blood.

E. B.

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EFFICACY OF NITRATE OF SILVER  
IN OPHTHALMIA.

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*To the Editors of the London Medical and  
Surgical Journal.*

GENTLEMEN,

HAVING read, in your valuable Journal, an account of the black ointment so much recommended by Mr. Guthrie, in gonorrhœal or purulent ophthalmia, I have been induced to try its effect in a case of acute ophthalmia in a strumous habit, in which its application completely succeeded, after leeches, blisters, and the usual remedies had been tried in vain to complete the cure.

I am not aware if the ointment has been tried in this kind of ophthalmia, as I have seen no account of it; but I am perfectly persuaded, that the mode of application is far preferable to the solution. The latter, as well as the tinct. opii, I have used in the case to which I allude, without any benefit; and the day after the application of the ointment, such was the change, that I was most agreeably surprised. Ten blisters, successively, had been applied, which, in strumous affections of the eye, are generally of advantage, in combination with other means, but in this instance failed in their operation. I feel it a duty to make this communication, as I have not seen any cases published where this mode of treatment has been adopted.

I remain

Your obedient servant,  
FRED. S. GERVIS.

*Tiverton, Nov. 1832.*

THE  
**London Medical & Surgical Journal.**

Saturday, November 24, 1832.

RAMADGE v. RYAN.

**DAMAGES AND COSTS, £647.**

*Independent of Defendant's Costs.*

SUCH is the expense incurred by Dr. Ryan in upholding the respectability of the profession, and exposing the empiricism of Mr. St. John Long.

It perhaps might be considered the wiser part to dismiss the subject without further remark; but there is something so curious and extraordinary in the termination of this affair, that we are induced to lay before our readers the following statement. We are urged to this conduct very strongly by feeling that Mr. Holmes and Mr. Hooper are, on our account, placed in a very awkward situation with the public; and we, therefore, deem ourselves bound to render them such assistance as may be in our power to set them right, not only with the world at large, but, what is of infinitely more importance to them, with the members of their own and our profession. Mr. Holmes and Mr. Hooper have sworn, that one of the persons, composing the jury in this cause, said to them, shortly after the trial of the cause *Ramadge v. Wakley*, that he was surprised at the smallness of the damages awarded against Mr. Wakley; that if he had been on the jury he would have given larger damages; that he was to be on the jury to-morrow, (meaning the jury empannelled to try our cause); and that he

would take care that the verdict did not go that way, or words to that effect.

The substance of this declaration, on the part of a jurymen, was conveyed to Dr. Ryan's ears, after the judge had left the Court, when it was of no use, and he said to Mr. Holmes and Mr. Hooper that they should have told him before the jury was sworn, or during the trial. Dr. Ryan, of course, took an early opportunity, after the verdict was pronounced, to communicate this intelligence to his solicitors; but, as the cause was tried on the 26th June, and the Court would not sit again till November following, plenty of time was afforded to investigate this fact, and to determine whether any application should be made to the Court for a new trial, founded on the presumed gross partiality of a jurymen, as evidenced by these expressions. During the period intervening between the trial, and the ensuing term in this present November, little notice was given to this extraordinary declaration; but as the term drew nigh, steps were taken in the matter; and, after some trouble, Mr. Holmes and Mr. Hooper succeeded in ascertaining that the party who (as they have sworn) made these declarations was Mr. John Minter Hart, of 19, Mornington-crescent. On the 31st of October last, Mr. Holmes and Mr. Hooper succeeded, after much difficulty, in procuring an interview with Mr. Hart, at his office in George-street, Hampstead-road. This interview, Mr. Holmes and Mr. Hooper will state, took place in Mr. Hart's

private room, without the presence of any fourth party.

Mr. Holmes and Mr. Hooper have both sworn that, on this occasion, Mr. Hart admitted he had used the expressions before stated, and added, that he knew a fact which would get a new trial for Dr. Ryan.

Relying on the contents of this affidavit of Mr. Holmes and Mr. Hooper, application was made to the Court for a new trial. A rule to show cause was obtained, and, after some delays, procured, on the suggestion of the plaintiff's counsel; the plaintiff produced to the Court, in answer to this application, an affidavit, sworn by this same Mr. Hart, in conjunction with one John Colman, of Craven-buildings, Strand, GENTLEMAN, one James Acheson, described as Hart's clerk, and one William Kelly, as of 39, Hertford-street, Fitzroy-square, GENTLEMAN.

In this affidavit Hart and Colman join in admitting the conversation between him (Hart) and Mr. Holmes and Mr. Hooper, immediately after the trial of the cause of *Ramadge v. Wakley*, excepting the words, "I will take care the verdict does not go that way." Kelly also, in the same affidavit, states that he was by accident present at the conversation in Hart's private room, on the 31st Oct.; but that he (Hart) so far from admitting the use of that expression, denied it altogether; and Hart further states, that he was *utterly unknown either to Mr. Holmes or to Mr. Hooper, and that nothing was said about a new trial on that occasion.*

On this affidavit, the Court discharged the rule for a new trial.

Whatever ground we may have to lament the precipitation of the Court in deciding at once on statements so opposed to one another, we, nevertheless, abstain from all remark. With the fears of another such jury before our eyes, we can say nothing, but we can give to the world the following public documents:—

KING'S BENCH.

IN THE MATTER OF J. M. HART.

*Master's Report.*

This was an application against John Minter Hart, an attorney of this court, to strike him off the roll, upon the ground that he had published an advertisement to lend money (with a reference by certain initials not his own to a place not being his own residence), and that he had treated for that purpose with a young man of the name of Paul, after he knew him to be a minor, and had taken from him bills to the amount of 200*l.*, and had advanced upon them only 20*l.*

Mr. Hart has sworn in answer that he knew nothing of such advertisement to lend money, that he only acted in the business as attorney for one Goodenough, who was a person of property; that Paul represented himself as of age, and gave the bills to Goodenough, who advanced the 20*l.* in the presence of Hart.

And it is sworn by Goodenough that he first met Paul by appointment at a coffee-house, and afterwards at Mr. Hart's, and that he, Goodenough, received the bills of Paul and paid him the 20*l.*

On the part of the application, it is sworn in reply, that Paul never represented himself as of age, and never met or had any communication with Goodenough, nor ever saw him at all; that the treaty was wholly with Hart, who received the bills and advanced the money himself, no such person as Goodenough being present, nor any other person than Paul and Hart; that no information can be obtained as to Goodenough being a person of any property, and that his address, as given by himself, appears to be Mr. Hart's own residence. That bills answering the description of the bills in question have been attempted to be negotiated, and have not the name of Goodenough upon them. And that the same or a similar advertisement has been answered by other persons, who have in like manner been introduced to Mr. Hart, and have treated with him for the purpose of borrowing money.

An opportunity has been offered during this reference of confronting Paul and Goodenough, with a view to the identity of the parties; but Goodenough has not been produced. Notice has also been given for production of the bills, but they have not been shown.

After a careful examination of all the circumstances, I am led to the conclusion that the defence is false, and that the case for the application has been established.

*In the Court of King's Bench.*—Monday, the 30th day of January, 1832, in the second year of King William the Fourth.

In the matter of John Winter Hart, Gent., one, &c.

Upon reading the rule made in this matter on Thursday, the third day of November in Michaelmas term last past, and upon hearing the Master's report thereon, It is ordered that John Minter Hart, an attorney of this court, be struck off the roll of attorneys of this court.—Upon the motion of Mr. Gurney. By the Court.

The following published documents show the respectability of Kelly.—

*Times, May 31, 1830.*

*Kelly v. M. Adams.*—This was an action brought to recover 450*l.*, the price of a race-horse called "Criterion," alleged to have been sold by the plaintiff to the defendant for that sum.

*Mr. Serjeant Taddy*, who was assisted by *Mr. Serjeant Andrewes* and *Mr. Justice*, in support of the plaintiff's case, put in two letters, purporting to have been written by the defendant to the plaintiff, in March and June last year, in each of which the writer promised to pay the 450*l.*, which he had agreed to give for "Criterion," in a short time.

*Mr. Serjeant Wilde*, who with *Mr. Serjeant Bompas* conducted the defence, contended that the letters produced must be either wholly or in part forgeries, and called witnesses, who proved that the plaintiff purchased the horse in question from a gentleman on the turf, at the commencement of last year, for 100*l.*, for which he gave a bill at six months, accepted, by way of accommodation, by the defendant. In some time afterwards, the horse, when in the defendant's stable at Fulham, received a kick from another horse, which obliged him to send him to a veterinary surgeon's, where, after appearing for some time to be recovering, he ultimately died. Upon the horse receiving the injury, the plaintiff observed that he would not have wished it for 50*l.*, and being told that the defendant would take him off his hands, he said, "No, he would chance it." And yet it was subsequently to the time when this was stated to have taken place, that the first letter, which apologized for the defendant's having

taken the horse into his own stable, purporting to have been written. There were other circumstances also stated, which were very inconsistent with the dates and expressions used in the letters. The defendant was described as being a young man, and the plaintiff, who passed by the name of Captain Kelly, as being upwards of forty.

The jury returned a verdict for the defendant.

*Times, July 26, 1832.*

*Insolvent Debtors' Court, Tuesday, July 25, 1832.*—*William Fredrick Kelly*, who described himself as a gentleman, was opposed in person by two creditors, named Jewel and Potter, and was supported by Mr. Cooke.

The insolvent, it appeared, had been a captain in the navy; he resigned his post in 1815, but was not entitled to half-pay; he denied that he represented himself as a Captain at the time he contracted the opposing creditors' debts, but they stated that he did. He brought an action against a gentleman named Adams, for 450*l.*, the value of a race-horse: he lost the action, but Mr. Adams had since promised him the money. He had given up for the benefit of his creditors an acceptance of Mr. Bayntun, M. P., for 120*l.* which had been dishonoured. He had some property in the possession of Messrs. Wigley, the bankers at Brighton, which was placed in their custody in the year 1825, which they now refused to part with, a female having made a claim upon it. For this claim the insolvent said there was no pretence, but it was made under very peculiar circumstances.

Mr. Jewel complained that the insolvent had swindled him out of 50*l.* He purchased of him a horse for 50*l.*, which he warranted sound; it turned out unsound, and he returned it. He consented to lose 15*l.*, and the insolvent gave him two bills,—one for 10*l.* and the other for 25*l.* The former was paid, but the latter being dishonoured, an action was commenced against the insolvent.

The record in the action was produced, and it appeared that in consequence of the insolvent pleading to the action, the costs amounted to 3*l.* 17*s.* 6*d.*

The insolvent said, that when the horse was returned he did not know it, the animal having been trimmed and half starved. The action was pleaded to without his knowledge.

Mr. Commissioner Law said, that he should require evidence to satisfy him that the insolvent's description of a gentleman was correct: he apprehended he ought to have described himself as a Captain, he being liable to be called upon to serve. He should also require further evidence as to the property at Brighton. On being satisfied on these two points, he should pronounce a judgment for the vexatious defence to Mr. Jewel's action.

MIDDLESEX } *His Majesty's Debtors' Prison*  
TO WIT. } *for London and Middlesex.*

I certify that William Kelly was brought into custody on the 16th day of April, 1832, by virtue of a writ of *ca. sa. levy*. 59l. 10s. at the suit of George Jewel, and also detained by a writ of attachment of privilege, oath for 25*l.*, at the suit of Thomas Roberts; and further detained by a Judge's warrant for not appearing at the Surrey Assizes to answer an indictment for escaping from the custody of the Marshal of the King's Bench Prison.

The said William Kelly was discharged from my custody by order of the Court for Relief of Insolvent Debtors, on the 21st September, 1832.

SAMUEL BARRETT, Keeper.

18th Nov. 1832.

He was remanded for four months, to be computed from the 30th May, 1832, at the suit of George Jewel, by order of the Court for Relief of Insolvent Debtors.

S. B.

We have nothing to say as to the character of Acheson, save that he is HART'S CLERK.

Colman we have nothing to say about. He was an attorney's clerk, and has been for two years out of employment.

OUR readers must not blame us for not having published the account of the trial in the Common Pleas, agreeably to our promise; but we acted advisedly in withholding it. We now copy it from that bold and really independent paper the *Morning Herald*, which has the fullest and most accurate detail of the proceedings.

RAMADGE V. RYAN AND OTHERS.

This action was brought by the plaintiff, Dr. Ramadge, a respectable physician, residing in Ely-place, Holborn, against Dr. Ryan, the editor, and two other defendants, publishers, of the *London Medical and Surgical Journal*, for a libel.

The libel purported to be copied from a statement in the *Lancet*, edited

by Mr. Wakley, in which a charge of want of medical skill, in the case of a particular patient, was made against Dr. Ramadge. It further added that, after the plaintiff had reduced his patient *à l'extrémité* by a system of depletion, Dr. Tweedie was called in, and by pursuing a totally opposite treatment effected a cure—the patient, in fact, having died some time previously to the publication. The cause was tried before the Lord Chief Justice at the Middlesex Sitting, when a verdict was returned for the plaintiff—damages 400*l.* A similar action had been brought against Mr. Wakley for the libel in the *Lancet* the preceding day, and only one farthing damages was awarded. This disparity of verdicts occasioned great consternation at the time.

*Mr. Serjeant Taddy*, on a former day, obtained a rule to show cause why the verdict should not be set aside and a new trial had, on four distinct grounds. First, misdirection on the part of the Learned Judge; secondly, excessive damages; thirdly, that one of the jury had, on the day previous to the cause coming on, expressed surprise at the smallness of the verdict on the first trial, and stated that he was to be a juryman on the present, and he would take care that larger damages were given. This was moved on the affidavit of Messrs. Holmes and Hooper, two surgeons, who were witnesses on the first occasion, in which they swore that Mr. Minter Hart, the juryman alluded to, had made use of the above expressions. Another affidavit stated that Mr. Hart was an attorney, had been convicted of fraud, and finally struck off the rolls, and therefore unqualified to sit in judgment. Fourthly, That another Juryman had been described as living in Gloucester-street, Marylebone, whereas he resided in Hertfordshire, which, if it had been known, might have formed the ground of a challenge.

The Court, however, dismissed the two first objections, and only called upon Mr. Serjeant Wilde to show cause against the two latter.



The *Learned Serjeant* then submitted the affidavit of Mr. Hart, in which he denied having used the latter part of the expression relative to giving higher damages; but admitted that, on coming out of court, he met Mr. Holmes and Mr. Hooper, to whom he was utterly unknown, and then stated his surprise at the amount of damages; and added, that he was to be on the jury the following day. To which they merely replied—"Are you?" which was the whole of the conversation that then took place. He further went on to state that, in the present month, they called at his house, and asked him if he did not recollect having made use of the expression imputed, which he at once denied; but after sometime he recollected that he had made use of the words which he had sworn to, but no further. He was confirmed in this statement by the affidavit of a Mr. Coleman, who was present at the conversation in question, and did not hear Mr. Hart say anything about taking care that he would give higher damages; and the *Learned Counsel* contended that Mr. Hart was not only borne out by his own affidavit, but was supported by the conduct of the deponents themselves, who, although they were witnesses in the cause—were parties to a subscription raised in order to defray the expenses of the 400*l.* verdict—and formed part of the body of medical practitioners ranged in battle array, to destroy Dr. Ramadge for his advocacy of Mr. St. John Long—had never mentioned what they had heard, either to Dr. Ryan or to the attorney in the cause, when an objection might have been made, but had kept it locked up in their own breasts until the cause was lost, and damages, in some way commensurate with the injury sustained, had been awarded; and they found it necessary, as a dernier resource, to rake up something to disturb the verdict, and the fertility of their imaginations had presented this as the most probable ground. Was it likely, had such a conversation occurred, that they would

not, zealous as they were in the cause, have immediately communicated it? The utter improbability of the course they adopted, at once invalidated the accuracy of their statement; to say nothing of the fact of their afterwards going to Mr. Hart, to endeavour to refresh his memory of a circumstance which they did not themselves by any means feel certain had ever taken place. Mr. Hart, besides, had no motive, except a desire to see justice done, in giving such damages; he was perfectly unknown to both parties, as much a stranger to the one as the other, and, therefore, not likely to be biassed; and where such was the case, he (Mr. Serjeant Wilde) had to learn that the mere expressal of an opinion, after hearing the evidence, was to form the ground of tainting the decided verdict. In all the cases, where such a ground was allowed to stand, the party making a favourable expression to one of the litigant parties, such as that the verdict should go in a particular way, was proved to be the friend of him for whom he had stated he would decide. Here such was not the fact, and, therefore, the objection was not tenable for a moment. With regard to Mr. Hart's having been struck off the rolls for fraud, he had no doubt that had the fact been known to either party, it would have formed the ground of inadmissibility as a juryman, as much to the one as to the other. The *Learned Serjeant* was then about to read the affidavit of the foreman of the jury, which went to show that they had not been, in any respect, biassed in the opinion they had formed by Mr. Hart, but

The *Chief Justice* stopped him, observing, that he did not think that what had occurred amongst the jury in their privacy, after they had left the box, ought to be admitted.

The *Court* also held that it was unnecessary to reply to the charge of the improper address of the particular juryman, as, being a special jury, the names of the parties had been furnished to each side, and they had had the opportunity of challenging if they had thought fit. They had not done

so, and their neglect must not be given as a reason for disturbing the verdict.

*Mr. Serjeant Spankie* followed on the same side, and characterised this attempt to impute misconduct to a particular jurymen as new, at least in specie. The Learned counsel then enlarged upon the utter improbability of Mr. Hart making the supposed statement to two entire strangers, unprejudiced as he was by any friendship for Dr. Ramadge. The Learned Serjeant then went over the same topics of argument urged by Mr. Serjeant Wilde.

*Mr. Serjeant Taddy*, in reply, submitted that there was no ground for giving discredit to the affidavits of Mr. Holmes and Mr. Hooper. It was not likely that they, coming into Westminster Hall in accordance with their *subpœnas*, to state what they knew of the case, should interfere in other respects, and give information to the attorney of any thing and every thing they heard. When they had stated all they knew, they would necessarily feel that they had done their duty, and all that was required of them. Besides, even Mr. Hart did not say all that he was represented to have said, an inference might be drawn from what he did say, namely, that he did not approve of the verdict, and that he was to be on the jury, when he would give much higher damages; so that, in fact, although he did not—yielding to his statement—say that he would do so, yet, by his words, he felt it to be inferred that he would. But his learned friend (*Mr. Serj. Wilde*) had adopted an extraordinary course of argument; for in one breath he had accused Mr. Holmes and Mr. Hooper of not being sufficiently zealous in the cause, in not having stated what they had heard; and then, in the next, he had blamed them for being too zealous, by going to Mr. Hart, to confirm, by his own memory, their suspicions of what he had stated. The Learned Serjeant then cited several cases, to show that different expressions of jurymen had

been considered to taint the decision they had come to, and therefore he submitted that the present case was peculiarly subject to that objection, and that the verdict, in consequence, ought not to be allowed to stand.

The *Chief Justice*, in giving judgment, stated that had the matter in the affidavit on which the rule was granted remained uncontradicted, he should have thought this a proper case to be submitted to a new jury; for, undoubtedly, it was a subject to bring extreme doubt upon the propriety of a verdict, where the jury had expressed any opinion as to the conviction in their mind, before the case was heard, or to cast a prejudice against trial by jury in general in the minds of the public at large. And in the case of "*The King v. Cook*," reported in the sixth volume of the *State Trials*, it was thought so serious an objection to a jurymen to have decided beforehand which way the determination of his mind would be, that they thought it an improper question to even ask the jurymen whether he had used any such expression; but left it to be proved, by witnesses adduced against him, whether he had so used it or not. But nothing similar presented itself in the present case. The affidavits that had been brought forward had been fully answered on the other side; and as that was the sole question now, he saw no reason for disturbing the verdict, and submitting the case to another investigation.

All the other judges concurred, and the rule was accordingly discharged.

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#### MEETING OF THE PROFESSION.

WE are requested by the Secretary of the Medical Committee, to state that a meeting of the members of the profession will be called early next week, to take into consideration what measures should be adopted for the liquidation of the damages (400*l.*) and the costs (247*l.*), incurred by the defendant in the cause *Ramadge v. Ryan*. Mr. Tuson has kindly promised the use of his theatre for the occasion.

### Rebiew.

*Published by the Authority of, and Dedicated by Permission to His Majesty's Most Honourable Privy Council, the Substance of the Official Medical Reports upon the Epidemic, called Cholera, which prevailed among the Poor of Dantzic in 1831, as transmitted to their Lordships; being an Analysis of the Epidemic in that City, founded upon actual Observation and Inquiry, with competent and well-authenticated Facts.* By JOHN HAMETT, M. D. 8vo. pp. 183, with a Map. London, 1832, Highley.

THE proper investigation of epidemic diseases is necessarily a difficult task, and that of cholera perhaps more so than any other. This is apparent from the Official Medical Reports before us, which were transmitted by Dr. Hamett to the Government. This gentleman was selected by the Privy Council to investigate cholera at Dantzic, while Drs. Russell and Barry were sent to Russia. Our author was promised the same promotion and reward as the other two physicians, provided his reports were approved of. A number of questions were to be answered on the origin, nature, and treatment of the spasmodic cholera, to which direct answers, as far as possible, were required. Dr. H. proceeded on his mission, and, having received the patronage of Mr. Gisbone, the British Consul at Dantzic, he was able to trace every case and every family in which the disease appeared in that city. His statements were authenticated by the consul, and fortunately for his professional reputation and veracity, as appears by the sequel, duplicates were also attested.

The authenticated reports were transmitted to government, and the Board of Health, composed of the College of Physicians, declared them the best on the symptoms and patho-

logy of the disease. They compared them, for accuracy and fidelity, to the descriptions of Aretæus. Dr. Hamett was the first investigator of the late epidemic cholera who distinctly marked the three definite forms of the disease, which were overlooked in the Indian reports, and such an accurate description as reminds us of those of Sydenham and Hippocrates. He grouped the various symptoms in the different stages, and his autopsic descriptions needed no authentication, for they are evidently copied from nature. In his semeiological and pathological reports he left his colleagues at St. Petersburg immeasurably behind; it would seem as if he did nothing but walk the hospitals. But when we consider the minuteness with which he attended to all the remaining and essential points of the epidemic, we cannot but be surprised at the industry and perspicacity evinced in the extent of his complicated labours. He has, in fact, furnished a plan for the investigation of all future epidemics. It would be an act of injustice to Dr. Hamett, and a great labour to ourselves, to attempt an analysis of his Reports in this Journal. But we can conscientiously assure our readers, that, if they follow him through his topographical description, the variations of season, his plain, honest, and well-authenticated statements of the first appearance and progress of the disease at Dantzic, they will not only see the utter absurdity of the idea of the importation of cholera, but of that of contagion.

Thus far we proceed without difficulty; but we now arrive at a part of the work which, at first, seems complicated, and perhaps to many will be unintelligible,—we allude to the analytical tables and arithmetical calculations, with algebraic symbols. But, on referring to the separate and general lists, agreeably to the directions at the heads of the columns, the mystery is unravelled. Here we are conducted to the conclusion, that 776 persons were attacked with cholera without any evidence of conta-

gion; and that 1932 persons, of all ages, besides many others, were, for at least twenty days, shut up in cholera dwellings, during the first two months of the epidemic, and escaped the disease.

Dr. Hamett concludes his work with the following chapter, "The question of contagion of epidemic cholera more fully considered." Any medical man, who has the smallest claim to erudition, must be convinced by this article, that the late epidemic cholera was not contagious. The author displays an intimate acquaintance with the opinions of the ancient authors, with the works of Hippocrates, Aretæus, Celsus, and with those of Sydenham, Morton, and others in our own country. We strongly advise the contagionists, as well as the non-contagionists, to peruse and maturely reflect on this chapter, and satisfied must they be that cholera is not contagious. We subjoin his conclusions:—

"The following are reasonable inferences from the numerous facts hereto adduced on the subject of epidemic cholera:—

"I. That it is spontaneously produced in certain weak constitutions, and disordered habits of body, in consequence of some indeterminate combination of certain atmospheric and local states,—and, occasionally, in consequence of different powers of electricity in the air, on such constitutions and marked habits, as may reasonably be inferred from the progress of the disease in certain electrical states of the weather.

"II. That cholera spreads epidemically but irregularly,—still,—in accordance with marked personal and local states, more than any other epidemic.

"III. That *general infection*, in the sense I use it, is produced only by an unfavourable or malignant state of the atmosphere in certain localities promoting such a state; and *special infection* by the air being rendered still more deleterious on being pent up, and further vitiated by the *effluvia* of dirt or liquid filth, or on being con-

taminated with the foul air and *effluvia* of several persons, whether affected or not, in close places. But surely these incidental aggravating causes may be fully removed, or partly obviated at least.

"With reference here to contagion or non-contagion by merchandize:—

"The very nature, indeed, of the disease seems to indicate that it is not necessarily propagated by merchandize. Independently, however, of which, there has never been any evidence whatever, in Dantzic, of its being so propagated; while all the authentic facts, which I have enumerated on this head, in that particular quarter, declare strongly against contagion in this way; to which I could add, as formerly stated, some others of a private nature also strikingly against it.

"In conclusion:—

"It necessarily follows from all the facts which I have adduced, that epidemic cholera cannot be possibly averted by all the combined mechanical restrictions of man. Indeed, the most accurate inquiries have hitherto ascertained that it rises spontaneously, and spreads capriciously and widely,—still, in conformity with its own determinate laws, in despite of every precautionary restriction; so that we might as well attempt to wall in the birds of the air. It is a specific effect on the powers of life, in such states of deterioration as I have particularly described, which might in a great degree have been obviated by precautionary measures, or by common prudence,—on the part of the objects and victims of it,—and by relief on the part of the considerate and benevolent, capable of bestowing charity; it is a natural effect of atmospheric impressions, in accordance with certain occasional physical states of the air,—in general, aggravated by the *effluvia* or exhalations from low, damp, and other unfavourable localities, which may, in a great measure, be counteracted by not fearing the disease itself;—and, above all, by comfort, consequent cheerfulness,

cleanliness, dryness, and ventilation. The best, and, indeed, only possible means, therefore, for arresting the ravaging progress of this dreadful epidemic, is to extend the blessed hand of charity, *where*, under all the deplorable circumstances I have mentioned, it is likely to take place and prevail.

“Accordingly, let the localities of the *miserable poor* be cleansed of all their impurities, kept dry, ventilated, and warm, in severe and bad weather, with comfortable fires, which, by promoting currents of fresh air too, will dispel stagnant exhalations; let them be well fed, cleanly and warmly clothed by night as well as by day; let them be occupied at their respective callings, and assisted therein, and have as little misery as their pitiable fate will admit of, to endure and brood over; and let proper medical assistance be rendered as soon as possible to such as are still inevitably attacked with the disease;—let, in short, all these be done for the sake of suffering humanity, and the inflictions and the ravages of the epidemic cholera will most certainly be, in a very great degree, obviated and diminished.”

In reviewing the relative positions of Drs. Hamett, Russell, and Barry, truth, justice, and a sincere and honest love of science, compel us to arrive at the following conclusions. Dr. Hamett has answered all the questions put by the Privy Council; the knights Russell and Barry have not answered a single question, but filled their Report with a frightful picture of the ravages of cholera in Russia, and with a mass of trash that is disgraceful to the state of science in England. They were *contagionists*; Hamett was and is a *non-contagionist*; and hence the base and dishonest manner in which he has been treated. He received no title; his reports were mutilated, and, in some measure, suppressed; his Report A, on Contagion, was absolutely stolen by some one connected with the present or the former Board of Humbug; but the thief was disappointed, as a duplicate and authenticated copy

was in the author's possession. He was harassed and annoyed by the first and present Boards of Health, or rather of Mischief; he was told he differed from the College of Physicians and the Central Board; and one of the members (we shall not say of which Board) absolutely proposed to him, to add a sentence at the end of his Reports to this effect:—that he had changed his opinions, and was now a contagionist! Another was more consistent when he said,—“It is impossible for Dr. Hamett to do any such thing: all his facts prove him a non-contagionist,” or words to that effect. His Reports were ordered to be printed by the Privy Council at the time of the alarm, but they were not published, and we suspect the unprincipled knave who caused them to be withheld. Oh! if truth was not a libel, how we should put his name in capitals, and hand it down to posterity for its execration! Truth was not the object of contagionists. Hamett was immolated, because he was an honest, conscientious, and scientific physician; who sacrificed promotion and sordid gain at the shrine of science. He reminds us of Hippocrates, when the haughty king of Persia, Artaxerxes, caused his ambassador to write to the father of physic, and offer him as much gold and silver as he desired, if he would visit Persia and cure the inhabitants of plague. He answered—“We abundantly enjoy food, raiment, and every necessary of life. It is not lawful for us to accept the gold of the Persians, or to cure barbarians of disease, when they are the enemies of our country.” —“Εὐδῶς ὅτι λογος ἐμοὶ σοφίης χρυσοῦ πλεον ἔδναται. Ἰπώκρατης Δημοτρωῦ.” —“He is ignorant that the love of science is greater with me than gold.” —No: it was not lawful for Hamett to accept promotion and a title, when he should sacrifice his conscientious opinion, and join the enemies of his country and of his species. We shall not comment further on the base treatment of this honest man;—we advocate his cause, as an injured and ill-used physician. In doing so, we

incur the displeasure of those in temporary power, which we despise from our heart. We espouse his cause, as we assent to the axiom of an immortal English poet—

“An honest man’s the noblest work of God.”

In conclusion, we have to state, that there is a Map prefixed to the work, illustrating the different points in which cholera appeared at Dantzic, and even showing the streets in which it appeared. Finally, we must mention, that our Consul, who used the most extraordinary and indefatigable exertions in ascertaining, through the faculty and police, every fact relative to cholera at Dantzic, observes, “The disease appeared at a time when it was not known to be within one hundred miles of the place; and without there being the slightest trace of communication with any foreign means of infection.” We now dismiss the subject, and leave the contagionists of the first and last Boards of Health to digest these remarks as they may.

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#### TUMOURS OF THE HEAD AND NECK.

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WE copy the following cases from Dr. Macfarlane’s very interesting Surgical Reports:—

“*Adipose Sarcoma on Head—Extirpation followed by Erysipelas—Cure.*”

“W. J., æt fifty-four, had a large, prominent, well-defined, and doughy tumour, about the size of a small orange, situated over the centre of the left parietal bone. Its origin was attributed to a blow he had received on the part about three years before, and since that time it had been slowly increasing. It was freely moveable over the subjacent parts, but firmly adherent to the integuments, which retained their natural colour. Its surface was traversed by several enlarged veins. It was broader and more expanded at the apex than at the base; and it only gave him pain

when compressed by the hat, or when otherwise subjected to external irritation.

“As this tumour had all the external characters of adipose sarcoma, it was extirpated from the subcutaneous cellular tissue, to which it was confined, and found to possess the structure peculiar to this class of tumours. It was enveloped in a fine cyst; and in the centre the adeps was considerably condensed, so as to give the part a hard feel. There was a good deal of venous hemorrhage, but only one artery required a ligation.

“This patient was seized on the third day after with a smart rigor, followed by erysipelas, which commenced at the wound, and extended over the scalp and face. The febrile excitement ran high; there was considerable cerebral disturbance, and for several days he was in a dangerous state. Leeches and cold applications were freely used to the affected surface. Free vomiting and purging were produced, and maintained for some time by the emeto-cathartic mixture. Towards the end of the disease, when typhoid symptoms manifested themselves, and the delirium became low and muttering, the solution of the carbonate of ammonia was of great advantage. The edges of the wound separated, as usually happens from such violent local and constitutional disturbance, and superficial sloughing took place; but soon after the cessation of the erysipelas, the part assumed a healthy aspect, and cicatrized rapidly.

“In the preceding case, the patient left the Infirmary the day after the tumour was extirpated, and was exposed to cold and fatigue, which were probably the exciting causes of the erysipelas. This affection is exceedingly apt to supervene on wounds and other injuries of the scalp, however slight and trivial they may be. In whatever manner these may be treated, erysipelas may supervene; nevertheless, I am satisfied, that where sutures are employed for re-

taining the edges of the wound in contact, this unmanageable and frequently dangerous disease is more apt to occur than when the ordinary dressings are had recourse to. The smart antiphlogistic treatment, adopted in the last case, is the one which I have found most generally successful. I have lately had an opportunity, in erysipelas succeeding to a small punctured wound of the scalp, of trying the local application of the nitras argenti to the inflamed surface, as recommended by Higginbottom, which proved successful in arresting the disease.

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*“ Adipose Sarcoma on Head—Tumour developed under the Occipito-frontalis—Operation—Cure.*

“ J. G., æt. forty-seven, had had a soft, flat, ill-defined tumour, growing over the centre of the occipital bone, for about five years, when he applied at the Infirmary to have it extirpated, in August, 1831, and for which he had previously used a variety of local applications without benefit. On proceeding to remove it with the knife, I found it covered by, and intimately adhering to, the occipito-frontalis muscle, which was much thickened. The wound healed without difficulty, and no untoward occurrence took place. On dissecting the tumour, it was found to be composed of adipose matter, contained in a distinct cyst, and much flattened in shape by the resistance to its development, produced by the tendinous expansion under which it was situated.

“ The difference in the external size and prominence of the tumours, in the two last cases, was very great, and depended on the slight resistance which the one encountered to its external growth, compared with the firm and unyielding covering by which the other was bound down. The one was prominent, well-defined, somewhat pyriform in shape, and would soon have become pendulous; while the other was broad, flat, and appear-

ed to blend gradually with the surrounding parts.

“ The scalp is peculiarly liable to become the seat of encysted tumours. These are capable of being removed by a very simple and easy operation; and, as they are to be met with almost daily in practice, I shall not now enter into a narration of cases to illustrate either their size, situation, or the varying nature of their contents. I shall only adduce the following case, to show that a simple tumour of this description, although it has been long benign, may yet, in process of time, become malignant. Before doing so, I may state that I have seen other two cases of a similar kind. In one of these, amputation of the penis for cancer had been resorted to, a few months before the tumour on the head assumed the appearance of malignancy. This patient ultimately died, in consequence of the disease being propagated to the inguinal glands.”

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COMMISSION APPOINTED TO ASCERTAIN THE PROGRESS OF THE CHOLERA IN THE DEPARTMENT OF THE SEINE.

EIGHT gentlemen appointed have been actively engaged in the 80 communes of the department of the Seine, in collecting facts upon the following points:—1st, the date of the first cases which appeared; 2, the number of cases and deaths; 3, the names, ages, sexes, and places of residence of those who fell victims; 4, the state of each commune, the direction of the streets, streams, drains, &c.; 5, the average deaths in former years; 6, on the causes of insalubrity, and the most likely means to remedy them.

From what has been collected hitherto it appears—1st, that old people have suffered in a great proportion; 2dly, that those places usually considered the least unfavourable to health, have not been *always* those where the disease has most prevailed; the *Halle au Ble*, for instance, where one person only died; 3dly, that in the

warm season more young persons died than those advanced in life.

Were an investigation of this kind as practicable in London as in Paris, we are quite sure that it would meet with opposition from certain quarters.

#### BOOKS.

A Treatise on Inflammations, explaining their Pathology, Causes, Consequences, and Treatment, with their Effects on the various Textures of the Body; being an extension of a Dissertation on Inflammation of the Membranes, to which the Jacksonian Prize for 1828 was awarded by the Royal College of Surgeons, London. By GEORGE ROBERTSON, Surgeon, of Liverpool. Vol. I. 8vo., pp. 456. London: Longman and Co.

This is a valuable work, and well deserves a place in every medical library.

An Essay on Hydrophobia. By JAMES LOMAX BARDSEY, M.D. Physician of the Manchester Infirmary, Lecturer on the Principles and Practice of Physic, &c. (From the Cyclopædia of Practical Medicine.) 12mo. pp. 146. 1832. 8vo. pp. 84.

An Essay on Diabetes. By same author. Manchester. 1832.

These dissertations evince research, judgment, and ability, and add to the reputation of the respected author of the Manchester Hospital Reports.

#### NOTICES TO CORRESPONDENTS.

••• In consequence of daily occupation in obtaining evidence in the cause of Ramadge v. Ryan, for the last fortnight, we have been unable to reply to several Correspondents, whose inquiries were not of an urgent nature. We trust we offer a sufficient excuse for our silence, and also for our omission of reviews and notices of books. Daily attendance in the Court of Common Pleas, during the last week, prevented Dr. Ryan from superintending the management of this Journal with that care

and attention which it requires; and his absence caused the omission of several articles which now remain filed upon his table. He assures all contributors, that all matters before him will be attended to as soon as possible, according to the date of their reception.

*Boerhaave.*—We decline answering the question, whether a doctor or a surgeon violates his oath to support the dignity and respectability of the profession, if he joins or advocates a quack.

*Dr. Blake, of Nottingham.*—We are obliged for the communication, and shall insert it on the first opportunity.

*Dr. Houston, of Dublin.*—The name was not given us, or it should have appeared. We shall explain more fully by letter, as early as convenience allows.

*Grammaticus* has lost his time, or, if he knew any thing of English composition, he would be aware, that the word "if" before a verb, in the indicative sense, does not require the subjunctive mood. Suppose a statesman is speaking in parliament, and that the auditor says to another, "if he speaks as he thinks, he is an honest man," the sense is indicative, the statesman is actually speaking, and to use the subjunctive mood after "if" would be absolute jargon and a barbarism. The best English writers use the indicative mood after "if" where there is no doubt or contingency. Thus many writers err egregiously in using such a phrase as, "if there be pain"—when the pain actually is present.

*Gamma's* friends deserve the pillory. Every one of them is a contagionist.

*An Old Subscriber.*—The fee would not be refunded unless on the plea of poverty.

The Westminster Hospital, we are informed, contains over 100 beds. Our former correspondent was therefore mistaken.

*Mr. Hudson.*—The proposal of using nitrous oxide in cholera was made by a correspondent in August last, and is not new.

*Erratum.*—In Dr. Epps's first lecture, page 302, read *Triller* instead of *Priller*. And in second lecture, page 457, read *Latour* for *Lateno*.

*The following Members of the Medical Profession, and the Public generally, have subscribed, to aid Dr. Ryan in defraying the Law Expenses, incurred in defending the Dignity and Respectability of the Faculty.*

The Right Hon. Earl Stanhope has intimated, to the Secretary of the Medical Committee, through Dr. Signond, his intention of subscribing.

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Dr. James Johnson, Physician Extraordinary to the King . . . . .	10	10	0
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Dr. J. Sanders, Edinburgh . . . . .	1	1	0
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Dr. Conquest, Lecturer on Midwifery, St. Bartholomew's Hospital . . . . .	2	2	0
Ditto . . . . .	1	1	0
Dr. James Bardsley, Physician to the Manchester Infirmary . . . . .	1	1	0

# London Medical and Surgical Journal.

No. 44.

SATURDAY, DECEMBER 1, 1832.

VOL. II.

## LECTURES

ON THE

## PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

Delivered at the University of London,

SESSION 1832—1833,

BY

PROFESSOR SAMUEL COOPER.

LECTURE IX., DELIVERED OCT. 22, 1832.

GENTLEMEN,

I HAVE already mentioned, that healthy inflammation is always acute, and that the changes which happen in it are soon brought about: thus, if it is to terminate in *resolution*, it will usually do so in a few days; and, if in *suppuration*, the same space of time will be sufficient for the production of this event. When such inflammation does not quickly end in resolution, a change in the action of the vessels frequently ensues—a modification takes place in it, the result of which is the formation of a peculiar fluid called *pus*. I may here explain the meaning of the terms *suppuration* and *abscess*: by *suppuration*, surgeons always signify the process by which pus, or the matter of sores, wounds, or abscesses is formed; and by an *abscess*, they understand a collection of such matter, but more especially a collection of it in the texture or substance of a part; for when it is in a *natural* cavity, surgeons do not invariably call the case an *abscess*, but, very often, simply a *collection*, or *effusion of pus*. Gentlemen, when the treatment, which I described in a former lecture, fails in bringing about the resolution of a phlegmonous inflammation, the vessels of the part soon change their mode of action, and the formation of purulent matter is commonly the result. However, you are not to suppose, that, when suppuration takes place, all the inflammation becomes suppurative. No,

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this is not the case: there always remain around the seat of suppuration a considerable degree of common inflammation in the adhesive stage; in fact, in many examples, you will see the adhesive, suppurative, ulcerative, and gangrenous stages of inflammation, all co-existent at different points of the parts affected. When phlegmonous inflammation is about to lead to the formation of an abscess, there is an aggravation of all the local symptoms and of the fever; there is greater pain and a more severe degree of constitutional disturbance; that is, supposing the inflammation to be extensive or violent enough to produce fever; for we frequently see inflammations terminating in suppuration, which are so slight as not to affect the constitution at all. The patient is conscious of a distressing pulsatory sensation in the inflamed part; and while the redness and tension of the greater portion of the swelling are much augmented, there is one part of it which becomes soft and prominent, attracting notice not merely by these circumstances, but by its conical figure, as also its colour, which is different from that of the rest of the tumour, being whitish, or yellowish. Now this conical, softish projection on the swelling is technically called the *pointing* of an abscess, which in fact is the appearance, or change, produced by the near approach of the matter to the cuticle. In proportion as the matter advances to the surface of the body, the textures intervening between the cavity of the abscess and the cuticle are removed by absorption, or by a process somewhat analogous to ulceration. In general, some time before the abscess *points*, a *fluctuation* may be perceived in the swelling, a sign, indeed one of the surest signs, that matter exists within it, inasmuch as a true fluctuation can only be felt where fluid is present. Hence, when surgeons are examining tumours suspected to contain pus, you will hear them commonly inquiring of one another, whether they can feel a *fluctuation*. This may be perceived in many instances in which there is no *pointing*, and even when the matter lies at a considerable depth. The knowledge of the right manner of examining

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The first is, to shorten the patient's pain. The confinement of pus, by rendering the surrounding inflamed parts tense, or by pressing upon them, is always attended with considerable pain. Another is, to remove the possibility of the pus spreading deeply or widely, and forming sinuses. You will sometimes meet with small imperfectly suppurated swellings, having around them an extensive hardness. Perhaps it is better not to make an early opening in these; because it is observed, that the hardness will subside more quickly if you let the pus remain for some time in the part. Such abscesses are said to get well soonest, when an early opening is not made. They appear, indeed, to be cases, in which you may very well try the effect of the nitrate of silver, before you have recourse to the lancet.

If you mean to let an abscess take its own course, you should employ warm emollient applications, in order to promote the progress of the matter to the surface, and to relieve the pain. You must also prescribe such medicines as are suitable to the patient's health and state of constitution. Generally, you will have to give saline aperients and antimonials; sometimes, too, opium will be found absolutely necessary, on account of the intensity of pain, which the patient is enduring.

I will next consider the *plan of opening abscesses*, and the cases which particularly require the early adoption of the practice. All experienced surgeons recommend abscesses to be opened under the following circumstances; as soon as the presence of matter is indicated by a fluctuation, or even sooner, if the nature of the case can be satisfactorily made out by other circumstances.

First; abscesses, arising from the extravasation of irritating fluids in the cellular tissue of parts. To this class belong collections of matter, produced by the effusion of urine in the cellular membrane of the scrotum and perinaeum, or by the escape of fecal matter into any situation where it has given rise to supuration.

Secondly; abscesses preceded by violent inflammation, and situated in parts abounding in cellular and adipose substance; such as those occurring about the verge of the anus, the circumference of the rectum, the sides of the neck, the groin, the armpits, and the ham. In these situations, if abscesses are not opened, the pus is always disposed to spread, and thus extensive mischief may be produced. The puncturing of such abscesses is to be followed by the use of emollient warm applications, because, as I have repeatedly observed, the inflammation does not terminate when supuration commences, neither does it end directly the matter is let out.

Thirdly; chronic abscesses generally require an early opening. Indeed, the common rule is to open them immediately you can perceive that pus is present; for if you neglect to do this, it will frequently be a long time before

they make their way through the skin. In fact, the disposition to active inflammation and ulcerative absorption in the intervening parts is exceedingly slight, so that it is very long before any pointing occurs. In the mean time, the matter will be increasing and the cyst enlarging. Now, by opening these abscesses in due time, it is evident, that you are preventing the disease from becoming more serious, and even dangerous, from its mere extent.

Fourthly; abscesses situated under dense aponeuroses, under thick fasciae, or lying between muscles, particularly demand an early opening. There is sometimes a degree of obscurity in such cases, with regard to the existence of pus; but, generally speaking, if the skin present an oedematous fulness over the situation of the pain; if the swelling be extensive and not distinctly circumscribed, and if the usual signs of the formation of pus have preceded the swelling, we may determine to make an opening; but particularly if a deep and obscure fluctuation can be perceived. Abscesses situated under the fasciae of the thigh and fore-arm, or under those of the arm and leg, come under this description: in these situations, the matter is long in reaching the skin, and if an opening be not made, the matter will diffuse itself extensively, wherever the looseness of the cellular texture will permit, so as to separate the fasciae from the muscles, and the muscles from one another; sloughing of the tendons also will be likely to take place, and considerable mischief and danger be the result. At any rate, recovery will be tedious, and the limb generally remain mutilated, or seriously weakened. Abscesses under the palmar and plantar fasciae, require the same treatment for similar reasons; and likewise those in the sheaths of tendons, which are well known to be textures seriously retarding the advance of the pus to the skin. In some of these cases, namely, such as are situated in the hand or fingers, the matter will spread under the annular ligament of the wrist and along the fore-arm, followed by sloughing of the tendons, which, as I have often told you, will not bear much inflammation without being destroyed, and then, of course, the use of the muscles connected with them will be for ever lost. Such are the bad consequences of *whitlows*, or *paronychia*, in their worst and neglected forms.

Gentlemen, I may here observe, that, by the term *whitlow*, we generally mean an inflammation at the extremity of one finger, or of the thumb, but often extending to the hand, and which can hardly ever be brought to resolution. This inflammation occurs at various depths; sometimes upon the true skin, just under the cuticle, sometimes under the skin itself, which becomes thickened, and sometimes within the thecae of the tendons; and not unfrequently, in bad cases, the phalanges of the fingers seem to be affected at an early period. Whitlows often appear to be connected with a peculiar state of the constitution,

for many of them arise without having been preceded by any local irritation, or injury, and, like boils, attack principally young persons. However, numerous whitlows do come on in consequence of local irritation, as that produced by the lodgment of splinters of wood, by wounds, pricks of needles, &c.; and such cases take place in persons of all ages. I mention whitlows, as affording a good instance of the necessity of opening certain abscesses. Whitlows, indeed, can rarely be dispersed, or brought to resolution, by common means. Leeches, however, may be used to lessen the extent of the inflammation: cold applications rarely give the patient relief: poultices are often beneficial, but there is one objection to them, which is, that they sometimes thicken the cuticle enormously, and thus rather obstruct, than promote, the discharge of the matter. At all events, such thickened masses of cuticle should always be carefully removed. I have mentioned, that nitrate of silver has sometimes succeeded in bringing about the resolution of whitlows; but, generally, the best way of treating them is to make an early opening in them, for this is the great means of preventing further mischief. It is sometimes advisable even to make an incision in them before the matter can be felt; as, for example, when the disease is in the fibrous sheaths of the tendons; for if we delay to do so, in this case, the tendon will be destroyed, and the bone become implicated in the disease. Sometimes the whitlow is under the nail, in which case the nail must be carefully scraped until it is exceedingly thin, and then an opening made through it. There is one kind of whitlow of a malignant nature, the *paronychia*, or *onychya maligna*, attended with a dusky dark inflammation round the nail, and followed by ill-conditioned ulceration round and under the nail, which it is exceedingly difficult to cure, and which may continue for months. The plan of treatment consists in the evulsion of the nail, and the use of escharotics, such as a strong solution of nitrate of silver. The liquor arsenicalis, more or less diluted, is also an eligible application, and alteratives must be administered internally, such as the compound calomel pill, or small doses of the liquor arsenicalis.

Fifthly; another description of abscesses, which it is expedient to open, in their early stage, are those seated in the medullary texture, or natural cavities of bones, as in the antrum, the diploe of the skull, or in the medullary part of the long bones; in these cases, we must not hesitate about making an artificial opening, or, at all events, only hesitate until we are quite sure of the existence of matter.

Sixthly. Abscesses, so situated as to be liable to make their way into the cavity of the chest or abdomen, or into the capsules of joints, require an early opening: but, for reasons, which I have already explained to you, such events rarely happen; for, according to the

common principles of suppuration, an abscess will almost always make its way to the surface of the body, or into some passage or tube lined by a mucous membrane. It will generally take this direction, and the pleura, or peritoneum, instead of being weakened by the pressure of the matter, is for the most part, strengthened and thickened. Yet pus has occasionally burst through the pleura into the cavity of the chest, by which occurrence, patients have lost their lives. It is therefore the safest plan to prevent the possibility of such an event by a timely opening. The same rule applies to abscesses in the neighbourhood of the groin, or within the inguinal canal; those under the pectoralis major, and serratus major anticus muscles; those in the neck, under the sterno-cleido-mastoideus, upon the fascia separating that muscle from the more deeply seated parts. The matter collected in this situation, by taking the course of the great nerves and blood vessels, may descend towards the chest. In the museum of this university is a temporal bone, in the petrous portion of which an abscess formed, and descended from thence through the neck into the chest. Gentlemen, I will hand the preparation to you, in order that you may examine it. About a year ago, I attended a woman with an abscess near the angle of the lower jaw; in this case, the matter had descended as far as the sternum, and the patient was absolutely on the brink of the grave. I remember, that after this abscess had been opened in the lower part of the neck, the whole of the upper portion of the disease was cured in three or four days; and I think a more rapid transition from urgent danger to a state of safety was never seen. Perhaps, if I had not done so, the matter would have descended into the chest, and the event been fatal. The benefit of an opening made in the lower part of an abscess, that is, of a *depending opening*, as it is called, was here most convincingly exemplified.

Seventhly. In highly vascular and nervous parts: this is one reason why it is expedient to open whitlows early, for their pain is extreme; not only from the unyielding nature of the parts, but from the skin of the fingers being an organ of sense and consequently highly vascular and nervous; in the eye too, as soon as that organ has truly suppurated, the abscess must be opened.

Lastly, it is a fixed maxim always to make an early opening in every abscess, the matter of which is likely to produce dangerous consequences by pressing on some important part. Let me specify, as examples, abscesses near the urethra, the trachea, the pharynx, or the œsophagus, or upon the dura mater, or in the tonsils, where the collection of matter might seriously impede the functions of respiration and deglutition. Gentlemen, you will sometimes find it difficult to open abscesses situated in the pharynx, from their being so low down the passage, though we have instruments calculated to effect the purpose. When, however;

the abscess cannot be reached, it has been proposed to endeavour to make it burst by the use of emetics, as the action of vomiting puts the neighbouring muscles into violent action, so as to afford a chance of the object being fulfilled; but the right plan is to make use of a cutting instrument, if possible.

Whether the vicinity of a large artery to a collection of purulent matter be a good reason for immediately opening an abscess, is questionable; we do not generally find that arteries give way under such circumstances, unless, indeed, there be a ligature upon them, and an abscess has followed its application; but this is quite a different case, and one in which there is already an external opening. If it were not free enough, it should undoubtedly be enlarged.

With respect to bones, I think it is very rarely the pressure of the abscess that produces the mischief in them: when necrosis, or caries, takes place, the affection of the bone is either the original one, or has arisen from the same cause as produced the abscess itself. In scrofulous disease of the spine, the disease generally begins in the bone; cells are produced in the bodies of the vertebræ by the absorption of the earthy matter, and afterwards suppuration takes place. In this preparation, which I hand to you, you will see an example of this first change; there are cells in the bodies of the vertebræ, produced by absorption of the earthy matter.

I shall next speak of the methods of opening abscesses. There are three chief ways of doing this: 1st, by means of the lancet, or double-edged bistoury; 2dly, by means of caustic; and 3dly, with a seton. In almost all cases a cutting instrument is preferable to both the seton and the caustic; the opening is made most quickly, and with the least pain; there is no loss of substance, and a smaller cicatrix than with caustic; moreover, the opening can be made in the most advantageous direction, and of the exact size necessary. When a small opening is all that is required, a common lancet is generally preferred; but, for making a larger opening, the abscess lancet is the instrument frequently employed, as it has a broader blade; or another instrument, called the double-edged bistoury, which is very convenient. These instruments, you now see on the table, either of them may be passed into the abscess, and the edge carried upwards and forwards, as far as may be required, to make the opening of the proper size. Sometimes we make use of the common bistoury, which I shall perhaps have to use to-morrow in a particular case; I mean that of the young gentleman who was wounded in the back, and in whom I suspect matter is confined between the pleura and the inside of the ribs and intercostal muscles. In such a case, it would not be prudent to plunge an abscess lancet or double-edged bistoury into the place where the matter is supposed to be collected, but you would cut down carefully to it with an ordinary scalpel. Sometimes a

curved knife is used, when an abscess is near any part which it is our duty not to injure; an opening is first made with a common lancet; a director is then introduced, along which the curved knife must be passed, and thus the opening may be enlarged to any extent with perfect safety.

The situation, in which we are to make the puncture, is generally where the skin is thinnest, and the fluctuation most distinct, or where the abscess is inclined to point; but these considerations are not invariably to overrule every other one, because the opening should always be made, if possible, in such a situation as will allow the pus readily to issue. Sometimes, if we were to open the abscess exactly where it points, or where the fluctuation is plainest, the puncture would be too high up, and the greatest part of the matter would not be discharged. The plan then of making the opening in a *depending situation*, as it is termed, is one perhaps of greater practical utility, than any of the principles which can be specified in relation to this question. The size of the opening must be such as to let out the matter readily. Of course, when the pus is thick, the opening must be made proportionably large, and this will be particularly required in some scrofulous abscesses, the matter of which consists of a limpid fluid full of flakes of fibrine. When a phlegmonous abscess is extensive, and the skin thin, the opening should be made in a depending part; if the matter does not readily escape from the first opening, but extend under the integuments, it will be necessary to make another in a different place; this second opening is termed by surgeons a *counter-opening*, from its being often quite opposite to the first. But, in general, if care be taken to make the first opening in a sufficiently depending situation, there will be no occasion for a counter-opening. If you do not observe the rule I have given in this respect, you will often be compelled to make repeated punctures and incisions, and the patient will suffer a great deal of pain, which might have been avoided. Gentleman, another piece of advice I have to give, is always to keep the opening from healing as long as any good will result from its not being closed; that is, as long as the pus continues to be secreted abundantly, so as to require an outlet. If care be not taken, the puncture will sometimes heal by the first intention; and it is therefore frequently necessary to put a piece of lint between the edges of the wound until they have lost this disposition to be united by the adhesive inflammation. It must also be manifest, gentlemen, that incisions, made by the surgeon, are more disposed to close in this way, than the ulcerated openings made by nature.

Allow me next to make a few remarks on the subject of *sinuses*. When, in consequence of acute inflammation, a large abscess has rapidly formed, the matter sometimes burrows passages for itself in various directions in the cellular membrane, forming canals of various,

and often of considerable extent, which are called *sinuses*. They differ from *fistulae* in this respect, that the latter are passages, or canals, leading also from abscesses, but opening externally, and having no immediate disposition to heal; whereas *sinuses*, strictly speaking, are passages, leading only from an abscess into the cellular membrane, and not having an external opening. The reason why sinuses form, is because the matter is not able to escape, and being secreted too quickly and in too great quantity to be duly bounded by the adhesive inflammation, it forms passages for itself wherever the cellular membrane is loose. The chief means to prevent their formation is to open the main abscess in good time, and you will find, gentlemen, that making a puncture in an advantageous place, and of proper size, will likewise often be sufficient to make them heal after they are formed. If they do not yield to this treatment, the best plan will be to employ pressure. In some cases it is necessary to lay them open, or to inject them with stimulating fluids, but this is only in chronic cases, where the sinuses have been of long standing. It is the same with *fistulae*, they must be laid open and their cavities freely exposed, so that the matter may readily escape, and they will then soon heal up.

I have a few more words to say on the treatment of abscesses in the next lecture, in which *hectic fever* will be considered, a fever, claiming notice directly after the account of suppuration and abscesses, because so frequently connected with them.

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## CLINICAL LECTURES

DELIVERED AT GUY'S HOSPITAL,

BY

BRANSBY B. COOPER, ESQ., F.R.S.

On Monday, Dec. 3, 1832.

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EXCISION OF THE MAMMA—INJURIES OF THE SPINE.

LECTURE IV.

GENTLEMEN,

The first case to which I shall, this morning, direct your attention, is that of the young woman in Charity Ward, whose breast I removed last Tuesday week.

Eliza ———, a healthy girl, *ætat.* 16, was admitted into Charity Ward, Guy's Hospital, Nov. 7th, 1832, being the subject of a tumour in the right breast. She gives the following account of its cause and the progress of its growth: she states, that, twelve months ago, she received a blow on her right breast, which was painful for a few days; when the pain subsided, and she remained for six months perfectly well, until, by accident, she perceived a small tumour, seated very superficially, near

the nipple, being immediately on the spot where she received the blow. This tumour was entirely devoid of pain, but gradually increased in size for four months, since which time its growth has become much more rapid, producing more alarm than the increase of pain. At the period of her admission, the tumour was of the size of a large orange, somewhat flattened, and perfectly detached both from the integuments and the subjacent structures, neither extending into the axilla, producing any tenderness, or the appearance of the progress of disease in any other direction. The surface of the tumour was lobulated, some of the lobes moving upon each other, and which were not of an equal degree of firmness. The nipple was slightly retracted, although rather from the smallness, compared with the morbid growth of the breast, than from any diseased action in the nipple itself. A slight serous discharge was sometimes emitted from the nipple. Mr. Cooper, upon his first examination of the breast, pronounced it not malignant, and advised the patient to admit of its removal, as there was no danger of the return of the disease. She was ordered

*Julep ammon. c. pulv. rhei. c. bis die.*

The following remarks were then made on this case by the lecturer:—first, that he could not quite agree with the statement of the appearance of the patient being healthy, but that, on the contrary, she exhibited the general external signs of a strumous diathesis. Before, however, I enter more particularly into the consideration of this case, it will be well to remind you of Sir Astley Cooper's division of the diseases of the breast into three classes:—First, those which are the result of common inflammation, whether in an acute or chronic form, and which terminate either by what is termed "resolution," or the adhesive inflammation, or in abscess. This inflammation, whether produced by external injury or some constitutional cause, is indicated by the same phenomena as inflammation in other parts, requiring the same constitutional and local remedies: it is to be remembered, however, that the breast, like other glandular structures, is slow in the progress of its diseased actions, and equally tardy in the process and progress of its restoration. Such inflammation, therefore, in the mamme frequently passes into a chronic form, inducing a general enlargement and induration of the gland, which, although in itself, is neither of a malignant or dangerous character, may, in after life, upon the birth of a child, become a subject of great importance, and in some constitutions even put on a malignant form, from the inability of the organ to perform its natural function in the secretion of milk. It becomes a subject, therefore, well worthy of consideration, whether or not in such cases, where the natural structure of the breast, in young people, is entirely disorganized, (although by common inflammation,) it would not be better to remove it at once, than to run

the risk of the violent effects which would necessarily follow from the inability of the breast to perform lactation. If common inflammation should terminate in abscess, this stage is also indicated by the phenomena that accompany the formation of matter in other parts of the body, but, from the nature of the structure, goes on indolently, and remains usually for weeks or months, requiring great attention to constitutional means to prevent the ill effects of its slow progress.

The second class of diseases of the breast, described by Sir Astley Cooper, are those which arise from peculiar or specific action, but which are not malignant. In this class may be enumerated the hydatid, the chronic mammary, or lobulated tumour, the scatoma, the pendulous, and the irritable breast. In these diseases, which may be set up probably from some local irritating cause, or whatever indeed induces inflammation, leading not only to disorganization of the natural structure of the breast, but also a specific action, producing an adventitious cyst, containing fluid in the hydatid, the consolidation of the chronic mammary, or the deposition of fat in the scatoma, the hypertrophy of the pendulous, or the morbid sensibility in the irritable mammae. Each of these diseases offer diagnostic marks sufficiently clear to prove their specific action, and which never go on to the destruction of life, by inducing similar disease in distant parts of the body, but destroy life, if they do terminate fatally, only by wearing out the constitution of the patient, in the same manner as common abscess destroys life by the quantity of pus secreted; and the medical attendant, by the colliquative perspiration, the flushed countenance, the rapid pulse, the parched tongue, the distressing thirst, and the general debility of his patient, forms, unhesitatingly, an unfavourable prognosis, and yet cannot designate the disease of a malignant character, according to the common acceptance of that term.

In the third class of diseases of the breast, we find they are not only founded in local and specific actions, but are also connected with a peculiar and unhealthy state of the constitution, leading to the tendency of a similar disease in distant parts of the body on the slightest exciting cause, and on that account, therefore, may be termed *malignant*. Fungus hæmatodes, and schirrus, or cancer, are the diseases which occur to the mind upon the term malignant disease, over which medical science has no control, and the subject invariably falls a victim to this diathesis.

I refer the disease of this girl to the second class, considering the enlargement produced by a specific action, as it had gone beyond the termination of common inflammation, and did not put on the signs of malignant action. There was, however, gentlemen, a difference of opinion with respect to its nature. In my opinion, the only circumstance which gave to it the character of malignant disease was the

congested state of its veins, a state invariably concomitant with fungus hæmatodes. So much stress, however, should not be laid upon this symptom, for whatever induces a sudden enlargement of the breast must necessarily press upon the superficial vessels, and retard the flow of blood through them; unless, therefore, there be other symptoms indicative of malignancy, that alone should not be considered conclusive. My reason for recommending the removal of this breast was, from the conviction that it was so disorganized as to be incapable of ever performing its natural function. Dreading, therefore, the effects of the intimate sympathy between the uterus and the mammae, I feared, that should she ever become a mother, it would then be a probable source of great inconvenience at least; and that, should she escape that, still there was to dread the cessation of the menstrual secretion. The girl consented to the operation, which was performed on the Tuesday week after her admission, and may now be considered convalescent; for although the wound is not entirely healed, the integuments are smooth, soft, and elastic, up to the very edge of the parts which are cicatrized. She is now taking

*Inf. cascariilla c. soda subcarb. ʒj. b. d.*  
with wine.

Mr. Cooper apologised to the class for not showing the breast, as it was in Sir A. Cooper's possession, who pronounced it to be a beautiful specimen of the chronic mammary or lobulated tumour.

The next case which I shall read to you is one of a fracture of cervical vertebræ.

John Ager, shipwright, ætat. 22, was admitted into Guy's Hospital, Nov. 13, 1832, into the Accident Ward, under my care. He reports that he had fallen from a wharf into the hold of a barge, the height of twenty feet. On his admission, he complained of pain in the arms and neck, with a sensation of general coldness, entire loss of sensation of the right inferior half of the abdomen, and imperfect paraplegia, as he had some slight sensation of his extremities; his pulse very feeble; great suffusion of countenance, giving the appearance of a person who is recovering from asphyxia; the abdomen tympanitic; the penis in a state of erection; has neither passed urine or had any motion since the accident, but had made water about an hour before, respiration difficult, performed almost solely by diaphragm.

Ordered

*Julep. ammon. every five minutes,*

till re-action had taken place, and to be covered up warmly; bottles of warm water to the feet.

Two hours after admission.—His symptoms were much the same; pulse unaltered and still; same coldness of the body. Half a pint of urine was drawn off by the catheter, as he describes himself to have lost all power even in attempting to void it.

— 11 P.M.—Re-action had taken place; pulse more full; complains of feeling restless and faint; drew off his urine, which was without smell.

Ordered

*Tinct. Opii gtt. xxv. mist. camph. ℥iiss. statim mane.*

Nov. 14th.—Has had little sleep; little or no change in the symptoms. Pulse not so full; rather more suffusion of the face, attended with watering of the eyes. One pint of urine was drawn off, but has had no motion since the accident. Castor-oil glyster was ordered, which not operating for three or four hours, at half past three in the afternoon he was ordered an

*Enema colocynth,*

which produced the desired effect, the contents of the bowels passing away involuntarily, and had three or four motions between three o'clock in the afternoon and eleven at night, at which time his pulse was about 100. Has sickness at the stomach. Six ounces of water were drawn off.

Ordered

*Tinct. opii ℥ xxv. statim.*

which allayed his sickness.

15th.—Pulse 100, fuller; less distress of countenance, although still suffused; watering of the eyes ceased; breathing less difficult, but still only performed by the diaphragm. The tongue covered with a light brown dry film; incessant nausea, with frequent vomiting during the night; bowels frequently opened, the contents passing away involuntarily.

10 A.M. Sickness better; kept some coffee on his stomach; complains of great thirst; belly tympanitic; urine, which has been drawn off, has a strong ammoniacal smell; symptoms remained the same all the day, excepting that his sickness returned in the afternoon. Ordered

*Brandy and soda water,*

which remained on his stomach.

Twelve at night, ordered

*Tinct. opii. gtt. xxx.*

The water which was drawn off was highly ammoniacal.

To relate all the symptoms which occurred up to the 21st of November, would only be to reiterate the symptoms which have been just described, excepting that he suffered latterly from gangrene about the region of the sacrum from the pressure of his body. This is an effect invariably accompanying injury to the spinal marrow, and which has been attributed to the diminished influence of the nervous system; but I would rather consider it as the result of constant pressure on the same part, the patient being incapable, by voluntary motion, of relieving and changing his position. On the day previous to his death, his water passed from him involuntarily, as generally occurs. He became weaker and weaker until twelve o'clock, on Wednesday, the 21st of

November, when he died, retaining his mental faculties to the last.

Now, gentlemen, the first care of the surgeon should be to discover the precise history of the case, as there are a variety of causes which may give rise to symptoms similar to those produced by fracture of the spine, such as effusion of blood, of serum, or the formation of matter, and the only mode of forming a just diagnosis is by attention to the kind of injury sustained. If it be produced by fracture and depression of bone, all the symptoms which have been described occur immediately; if from effusion of blood, that may also prove as quickly the cause of the symptoms, and, under such circumstances, it would be almost impossible to form the distinction between the effusion of blood and the depression of bone, excepting that in the former case there can be no external sign of injury to the bone, while in the latter there may be, although even in this accident it is not always present. From the effusion of serum, or the formation of matter, the symptoms are always subsequent to the accident; in the first case earlier than in the latter, and the formation of matter is indicated by the same symptoms as in other parts of the body, and subsequent to which paralysis will occur. The prognosis in these cases, and from any of these causes, must generally be unfavourable; and if from depression of bone, death invariably follows at an earlier or more distant period, depending upon the proximity of the injury of the spinal marrow to the brain. In fracture of the bone, when from displacement the exact seat of injury can be discovered, the removal of the depressed portion may be recommended, if it be distant from the brain; but if it be high up in the dorsal or cervical region, the constitution must have received so great a shock from impaired respiration as, in my opinion, to render the operation abortive. No attempt should be made in such cases to replace the portion of bone with an attempt at "setting the fracture," as by the extension you would be as likely to lacerate the spinal marrow as to act upon the injured bone. In the cases of effusion, such remedies may be tried as would be considered most likely to act upon the absorbent system—locally applying irritating applications, and giving internally mercury, combined with antimony. In despite of all remedies, the patient died.

*Post-mortem.*—On raising the skin, there was a remarkable absence of adipose coating, and the muscles were particularly firm and dry; two of the lower ribs on either side united, so as to form a bifid termination. Left lung was free from pleuritic adhesions, rather engorged, somewhat emphysematous, indicated by the rounded and puffed margin; right lung had very slight adhesion at the summit, the substance rather too firm for a state of perfect health; the heart natural; rather more fluid in the pericardium than is usually found, and the membrane itself somewhat tinged with a



very light rose-colour, arising from the turgescence of its vessels; the intestines very much distended with flatus, but presenting no other morbid appearance than in one or two places a small flake of puriform secretion on their peritoneal covering. The bladder was distended, and at its posterior part was adherent to the parts in contact with it by bands that assumed a considerable degree of organization; on evacuating its contents, and laying it open, the mucous membrane was found thickened, discoloured, and ecchymosed, in patches, with flakes of lymph scattered all over its surface; the urine was tinged with blood, and highly ammoniacal. The ureters healthy, as were the spleen, pancreas, and liver. On turning the body to lay open the back, for the purpose of examining the vertebrae, no mark of external injury was visible. The whole spinal cord was removed, and found healthy, except a small spot opposite the sixth cervical vertebra, where the substance was broken down and discoloured. It may be proper to notice, that although the medullary substance was perfectly healthy, except in the part mentioned, there was a considerable turgescence of the vessels of the dura mater throughout. On a careful examination, the sixth cervical vertebra was found split longitudinally and separated, projecting backwards over the seventh. The posterior ligaments of the bodies of the vertebrae were almost entire.

The cause of the symptoms in this patient proves to have been compression of the spinal marrow by fracture of the sixth cervical vertebra; this was the precise point which I prognosticated would be the seat of injury when I first saw the patient, and this I was led to believe from observing that all the intercostal muscles were paralysed, and respiration was carried on only by the diaphragm. Many of the symptoms concomitant with injury of the spine are difficult to comprehend, such for instance as the priapism and tympanitic state of the abdomen, the rationale of which does not appear to be perfectly understood. The passing away of the feces involuntarily is to be explained by the paralysis of the sphincter ani muscle, and the continued peristaltic state of the intestines; the constipation in this case depended, probably, upon the state of the patient's bowels before the accident, and the difficulty of producing motions after is sufficiently explained by the torpid state of their muscular coat from injury to the nervous system; and the retention of urine is to be attributed to the loss of power of contraction of the muscular coat of the bladder. The involuntary discharge of urine which occurs in the latter stage of this disease, seems as if it depended upon the loss of the elasticity of the urethra, from the frequent introduction of the catheter, allowing the fluid to escape from the bladder somewhat upon the principle of the action of a syphon.

With respect to the suffusion of the countenance, it is a symptom which I have always

noticed attending injury to the spinal marrow, or even in diseased spine, where the patient is placed in the same state as from injury. I do not remember to have seen this symptom mentioned as a diagnostic mark of injury to the spinal marrow; but it is one from my own, however, upon which I shall always rely, as it portrays the imperfect decarbonization of the blood depending upon the inability of the muscles of respiration to perform their natural function.

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## CLINICAL LECTURES

AT THE

MEATH HOSPITAL, OR COUNTY OF  
DUBLIN INFIRMARY,

DELIVERED BY

DR. GRAVES, M.R.I.A.,

*King's Professor of the Institutes of Medi-  
cine in the School of Physic, Dublin.*

(Corrected by himself.)

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INTRODUCTORY LECTURE.—SESSION 1832-33.

*Clinical Instruction at the Meath Hospital—Encouragement and Rewards offered Students—View of the recent Improvements in Practical Medicine—Saline Injections into the Venous System—Iodine in Scrofula by Lugol—Alum and Nitrate of Silver in Hoarseness—Staphylo-pyrophorus by Bennati—Tongue Depressor by Charriere—Leeching the Mamma in Amenorrhœa by Loudon—Ordinary Views on Sanguinization erroneous—Discovery of Elliotson, Hydriodate of Potass in enlarged Liver—Efficacy of Tonics and Iron in enlarged Spleen by Percival—Singular Analogical Illustration—Hydriodate of Potass in Hydrocele by Ricard—Alkalis in Dyspepsia—Persequeiminate of Iron in Diarrhœa by Kerr—C. Iron in Chorea by Elliotson—Arsenic in Epilepsy by A. T. Thomson—Lobelia Inflata in Asthma—Sulphur in Paralysis caused by Lead and Colica Pictorum by Turner—Mercury in Erysipelas and enlarged Testis—Superior purity of Medicines in Dublin—Dr. Elliotson obliged to send there for Hydriodate of Potass—Muriate of Morphia—Cyanuret of Potass in Neuralgia by Trousseau and Rullier—Chloride of Lime in Typhus by Reid: in Diarrhœa, Scarlatina—Turpentine in Mœlena by Jackson—Bicarbonate of Soda in Blue Skin by Billiard—Removal of Atmospheric Pressure by Murray—Hydrostatic Bed by Arnott—Disinfecting power of Heat by Henry—Pepper Frictions in internal Inflammations by Hancock—Nuric Acid*

*in Tooth-ache by Ryan—Injurious effects of Digitalis in Palsy of the Aortic Valves by Corrigan, &c. &c.*

GENTLEMEN,

It is necessary for me, at the commencement of our course, to premise to you that my colleague, Dr. Stokes, and I, have determined to persevere in our plan of giving separate certificates, bestowing those of one kind on the advanced pupils who have the charge of cases, and of another kind on those who attend hospital duty alone. It is obvious, that those certificates possess very different value, the first class being of comparatively much greater importance. Possessing but a certain number of beds, and being aware of the natural deficiencies of junior students, we do not encourage beginners to undertake the charge of cases which we intend to reserve for those who are more advanced in professional acquirements. We have the satisfaction to announce to you, that certificates, heretofore granted by us, have, in many instances, proved available to the possessors in being the means of recommending them to places of trust and value. It is our rule to grant certificates of the first kind to those only who have been practically employed under our eyes. Young gentlemen may, for aught we know, be very diligent; they may frequent the hospital from day to day and from year to year, until their faces become perfectly familiar to myself and colleague; but we cannot on that account form the least estimate of their progress in practical knowledge; nor can we certify that a pupil has improved himself in distinguishing and treating diseases, unless he has actually practised under our superintendence. Unless he has done this, under what pretext can he claim from us a certificate, stating him to be fit to be entrusted with the care of patients? How can he expect us to testify that we know him to be capable of discharging the duties of an office so important as that of physician to an hospital or dispensary?

Gentlemen, the giving of certificates involves in itself a deep and heavy responsibility; as the teacher who gives them to ignorant and undeserving persons is justly answerable for the lives lost through their incompetence. Hence it shall be our rule to give the higher certificates to those only of whose progress in the treatment of disease we have personal cognizance. We make this announcement thus publicly, in the hopes it will be the means of saving us from the disagreeable necessity of refusing certificates to applicants not circumstanced as I have mentioned. When a hospital, an infirmary, or a dispensary becomes vacant, what piles of certificates are produced on the day of the election! It is quite natural that the electors, who are generally plain country gentlemen, should shrink from an examination of the immense mass of documents laid before them on such occasions. Thirty candidates appear; each has ten or fifteen certificates, equally strong, equally laudatory,

and, too often, equally undeserved. These certificates, examined more closely, are found to be all cast in the same mould; they appear like general formulæ, so invariable is their style of commendation. A perfectly correct moral conduct, unbounded humanity, unwearied diligence, and an intimate acquaintance with all the branches of medicine and surgery, are mere matters of course. Are we to wonder, then, that these certificates have little or no weight in influencing the result of the elections? The electors show their judgment in not attending to them. The only remedy for this crying evil is, that no certificates obtained for the particular occasion should be produced, and none should be received except those officially granted in public institutions as rewards for merit.

The next subject I have to introduce to your notice, gentlemen, is well worthy of your attentive consideration, and holds out prospects highly gratifying to every well-wisher of our species, and to every member of the medical profession who is not the mere slave of avarice, and who rejoices more in the good he is able to do, than in the quantity of money he receives. It is to the improvement which is taking place so rapidly in all the practical branches of medicine and surgery that I advert, an improvement so remarkable, that to me it appears almost incredible; indeed, when I call to mind the uncertainty of diagnosis and the inefficacy of treatment when I commenced the study of medicine, I can scarcely believe that my memory does not deceive me, and can hardly credit that so much could be done in so short a space of time.

I am not one of those who maintain that the knowledge of the present generation is comparatively superficial; nor do I uphold the good old doctrine, that our forefathers were both wiser and better than ourselves. It is true, that in medicine, as in other departments of human knowledge, our books are less ponderous, abound less with quotations, and pay less deference to authorities; but because we refer to nature in preference to preconceived opinions, and because we study her laws and not the systems of the last century, it by no means follows that we are inferior in learning. We search for, discover, and arrange facts; with us analogy supplies the place of theory; and we are not tempted to lose our time in investigating the *modus operandi* of the vital principle, or the primary causes of diseases; nor are we inclined to invent a doctrine, and afterwards uphold it, be it right or be it wrong. It is in this spirit we owe the numerous practical improvements that adorn the medical annals for the few last years; it is to the daily accession of new and important facts that we can trace the change which has been effected in our medical literature, and which, as a necessary consequence, has called forth the multiplicity of journals, quarterly, monthly, and weekly, with which the press now teems. No, gentlemen, medicine is not stationary, it is

advancing; let us add to the common impulse; let us strive to add new facts to the common store; let us endeavour to possess the merit of having manufactured, at least, one piece for the construction of the intellectual rail-road, on which knowledge, once placed, will proceed with a velocity hitherto unheard of. Were I to relate all the improvements I myself have witnessed, it would occupy several lectures. I shall content myself, therefore, with mentioning some of the most remarkable facts that have been lately ascertained; but as I am obliged to do it chiefly from memory, you must excuse the want of arrangement and connexion in what I am now about to lay before you.

One of the most curious experiments now made is that which we have witnessed since the arrival of cholera in Great Britain,—I mean the injection of very large quantities of fluid, containing various salts and animal matter, into the veins.

It is true, that this practice was founded on an erroneous theory, but still the results obtained are not the less wonderful: it is true also, that it has not succeeded in saving the lives of many cholera patients, as was anticipated, nor is it one which I should recommend. Yet, from the power which it evidently possesses of raising the pulse, and from the immense quantity which can be borne (quart after quart being thrown into the venous system), it appears to be a very remarkable experiment, and I think it probable, that it might be tried in fever with some hopes of a beneficial result. It would also encourage us to pursue those interesting investigations connected with the transfusion of blood, of the value of which, in hæmorrhage, you are all aware.

Among the most useful of the important acquisitions made by modern science, is the mode of using iodine in scrofulous diseases and ulcers, introduced by Lugol. In his work, you will find statements and details meriting the deepest consideration. I say this, because my colleague and myself have had repeated opportunities of verifying their truth and importance; you will, indeed, find Lugol's description of the scrofulous diathesis extremely accurate, and his mode of treatment very effectual. But we are not to suppose that the utility of this mode of exhibiting iodine is limited to ulcers originally produced by a scrofulous taint; for no fact is better ascertained than that the healthiest constitution may be gradually rendered scrofulous by a long continuance of debilitating causes; and where this takes place, the iodine will prove useful. Thus in some, whether from long confinement, from a too long continued application of the antiphlogistic system, or from any injudicious employment of mercury, open buboes are very apt to assume much of the scrofulous character, and are then best treated with iodine.

In cases of hoarseness and loss of voice, the insufflation of alum powder and the application of other strong astringents, as the nitrate of

silver, &c., has been lately introduced. The latter remedy has been employed by Bretonneau; and several new instruments have been invented for applying them to the affected parts, as the staphylo-pyrophorus of Benati and the tongue depressor of M. Chaviere. In cases of relaxation of the fauces, or glottis, and elongation of the uvula, those instruments and remedies cannot fail in producing desirable results.

It is to modern science we owe the discovery made by Dr. London, that in cases of amenorrhœa the menstrual discharge may be brought on by the application of leeches to the mammae. We find that, by applying two leeches every second day to the breasts, an evident afflux of fluid takes place, the nipples become turgid, and soon after the menses appear. There cannot be a stronger evidence than this of the sympathy which exists between the uterus and mammae. Of this Hippocrates was well aware, for we find him applying dry cupping-glasses to the breasts in cases of flooding. In the present case we perceive, that if two leeches be applied to the lower part of each breast every second day for a month, at the termination of the third week, the breasts swell to an unusual size, and menstruation appears soon afterwards. From this experiment, gentlemen, we may deduce a curious and important fact, that the periodic abstraction of blood from a part increases its vascular action and development, for we see the application of leeches producing fullness of the breast and turgescence of the nipple. This is very strange, and it would lead us to infer, that, in many scrofulous and indolent tumours, the application of a small number of leeches, frequently repeated, occasionally does mischief, by increasing the local determination. However, the law which should guide us in the application of leeches is perhaps not known in every case. With regard to menstruation, I would recommend to your perusal the valuable paper of Dr. Robertson, on this subject, in the last *Edinburgh Medical and Surgical Journal*. Dr. Robertson has shown the fallacy of the opinion so generally received, that the menstrual evacuation appears at an earlier age among females in warm climates than in cold. He has likewise noticed the very important fact, that, in many women, great irregularities as to the period, duration, and quantity of this discharge, are not inconsistent with a perfect state of health.

The person to whom clinical medicine is most deeply indebted is Dr. Elliotson, of London. Perfectly acquainted with the medical literature of the age, and intimately versed in the pathology of every form of disease, he has not limited his range to the investigation of opinions alone, but by his valuable discoveries, has added largely to the stores of practical medicine. Gentlemen, I should give you several very useful lectures, if I were only to detail some of the many improvements which Dr. Elliotson has made within the last

few years. You are all aware how long we have been trying to find remedies capable of reducing the size of the liver and spleen, when enlarged by organic disease. We have repeatedly tried mercury, and found that its exhibition was applicable only to those cases in which the increase of size is the result of inflammation. But we have forms of enlargement arising from diseased action, and depending on morbid growth. In such cases, we find that mercury runs down the patient's strength, while it produces no effect in checking disease. Here Dr. Elliotson has used the hydriodate of potass in very considerable doses (in one, two, and three drachms a day) with favourable results. You will have an opportunity of witnessing the trial of this remedy on a man in the upper ward, who has enlargement of the liver. In that diseased enlargement of the spleen, called ague cake, which sometimes proves very intractable, the hydriodate has also been employed. In this affection, mercury is totally useless: neither can I bear testimony to the efficacy of strong purging. The best remedial means I am acquainted with are strong bitters and tonics. Mr. Kirby related to me the particulars of a case of enlarged spleen in a child, treated by Dr. Perceval and himself. This child was quite emaciated, its belly excessively tumid, the legs œdematous, and the constitution so debilitated as to extinguish all hope. Dr. Perceval ordered a combination of gentian and iron, and the child recovered. Dr. Stokes and I have tried the Bengal spleen powder, which is a combination of powerful tonics, with good effects. Dr. Reyder, of Vienna, who was here some time ago, mentioned to me that it was observed at Bucharest, that dogs, which were known to have enlarged spleens, were found to be very fond of drinking forge water, and that the size of the spleen was thereby lessened. Analogy led to the trial of similar remedies in the human subject, and they were found to produce favourable effects. Hydriodate of potass has also been tried internally, by M. Ricard, in the cure of hydrocele, and with success. With respect to the employment of alkalis and acids, I fear, gentlemen, we are but in the infancy of medical science, when we see the indiscriminate way in which both are given in dyspepsia and many other diseases. Both exert a powerful influence on the system, and form a subject of interesting investigation. In that succession of boils, which occurs in a broken constitution, in ecchyma cachecticum, and rupia, we have frequently seen the acids employed; but my experience coincides with that of Dr. Elliotson in preferring alkaline remedies. If a person comes to you, who has been harassed by the eruption of repeated crops of boils, running through a process of imperfect suppuration, producing much irritation, loss of rest, and hectic symptoms, a combination of tonics and alkalis is the most effectual remedy you can prescribe. The liquor kali causticus, with

bark, will cure the disease, while acids give but very imperfect relief.

Another modern remedy is the peresquinitrate of iron, recommended by Mr. Kerr.

This is a remedy which, in certain cases, I can praise. I had, some time back, a young patient, affected by peritonitis, accompanied by diarrhoea and excessive and constant spasms of the intestines. The disease had originated in an obstruction, caused by eating nuts; the obstruction had continued four days, and was followed by violent inflammation of the mucous membrane, and, in eight or nine days, some degree of peritonitis with abdominal tumefaction. The fever and tenderness of belly gradually diminished, but he was still in a most dangerous state; his tongue parched, with total prostration of strength, and frequent recurrence of violent abdominal spasms.

These spasms produced very great irritation, prevented sleep, and reduced his strength very much, as they were brought on by the use of any kind of food; for this I wanted a remedy. His tongue was dry, but the pulse was somewhat reduced, and I ventured to give him the peresquinitrate, in doses of two drops in half an ounce of water, four times a day: under this treatment he improved. You will observe, gentlemen, that after the inflammatory action had been reduced, the spasms remained and became habitual, but was removed by the use of this remedy; I therefore entertain a favourable opinion of its efficacy in removing that spasm which attends diarrhoea. The carbonate of iron has been found useful in chorea by Dr. Elliotson; he gives it in doses of two drachms every eight hours. Dr. A. T. Thompson employs arsenic in epilepsy, in preference to the other metallic salts, but particularly to the nitrate of silver, from the tendency of the latter to discolour the skin. I must state, that I have never found it necessary to push the nitrate of silver to that extent, and yet, in several cases of epilepsy, I have found it a useful remedy. Arsenic has also been found of considerable service in angina pectoris, an affection which I think does not depend on organic disease of the heart, but seems to be produced by a peculiar state of the nerves, causing severe spasms of the chest. There is another spasmodic disease of the chest which has frequently baffled every form of treatment, namely, asthma. For the cure of this complaint, Dr. Elliotson recommends the lobelia inflata. The dose of arsenic recommended in angina pectoris, is eight drops three times a day. I have, at present, under my care, a lady labouring under this affection, and intend to employ the arsenical solution in the form prescribed. The paroxysm of asthma has been relieved by giving ʒi of the tincture lobelia inflata.

In cases of paralysis, arising from painter's colic, affecting the upper extremities, Dr. Bright has recommended cupping and blistering the nape of the neck. There was a man some time back under my care, who was

affected in this way, and derived much advantage from this treatment. You are all aware that strychnia has been repeatedly employed in paralysis, both of the upper and lower extremities. There is another remedy lately introduced, by Mr. Turner, of which you will see an account in the *Medical Gazette*. I allude to the reported favourable influence of sulphur in paralysis from lead, after colica pictonum. This remedy I have not as yet employed, but I am aware of the power of sulphur as a therapeutic agent, and intend to give it a fair trial in the paralytic cases before mentioned.

The use of mercurial ointment in diseases of the liver is well known. John Hunter and his contemporaries relied much on the local employment of mercury in syphilis, and various other diseases. This practice has fallen into disrepute among the moderns, many of whom are of opinion, that in order to produce any effect on a particular organ, mercury must first enter the system through the medium of the circulation. There is not, however, the slightest doubt, that mercury, locally applied, is capable of producing very beneficial effects. In cases of erysipelas, there is no better remedy than dressing the affected parts with strong mercurial ointment. In cases of disease of the testicle, in addition to other remedies, we have a most valuable auxiliary in mercurial ointment, repeatedly employed, so as to immerse the testicle, as it were, in it. In hernia humoralis, the same practice has been found very serviceable. It has been stated by Dr. Bright, that mercury applied to the tongue has produced ptyalism; and he mentions a case of paralysis, where the power of swallowing was lost, in which mercury applied to the tongue produced spitting and affected the gums. If this be true, it is another evidence of the utility of the local application of this remedy.

Among the class of narcotics, there is not one more useful than a preparation lately introduced, the liquor muriatis morphiæ. It is with great pleasure I state, that most of the new remedies employed in practice are to be procured in a state of great purity in this city. As a proof of this, I can mention that Dr. Elliotson was disappointed in the effects of the hydriodate of potass purchased in London, and was obliged to send to Dublin to procure it in a greater state of purity. Much of this advantage is due to the chemical knowledge and unwearied assiduity of our fellow citizen, Mr. Scanlan. The muriate of morphia will be found applicable in cases where other preparations of opium are inadmissible. You are all aware that opium sometimes averts the paroxysms of intermittents. Opium contains an alkaline principle, narcotine, which, in combination with sulphuric acid, has a remarkable effect in the cure of ague; it is useful for you to recollect this, as there are many countries where the poppy grows where bark cannot be readily procured; and it is also valuable in an economical point of view. You have

read, in Thomas's useful work on the practice of physic, that a dose of opium reduces the duration of a cold fit of ague, and sometimes arrests it entirely. This arises not from its febrifuge effects, but from its influence as a stimulant on the system. This practice is, however, decried by Dr. Hamilton, as it is frequently attended by re-action, increasing the head-ache and other distressing symptoms which attend the hot fit.

In tic douloureux and neuralgia, we have the cyanuret of potass recommended as a local application (four grs. to ℥j. of water) by Trouseau and Rullier.

The chloride of lime has been recommended externally in sores, and internally in typhus, by Dr. Reid of Dublin. The Archbishop of Cashel, a prelate of extensive scientific acquirements, bears testimony, in a late pamphlet, to its efficacy in improving the diarrhoea attendant on typhus fever, and its general merits as a therapeutic agent in such cases. It has been also recommended, by a writer in one of the London medical periodicals, as valuable in scarlatina. We have not, however, of late years, observed many of those cases of cyanche maligna which seem particularly to require the use of this remedy. The usual antiphlogistic treatment seems to be sufficient to combat the forms we meet at present; and the principal circumstance I have noted, for the last few years, is the occurrence of cases attended by coma and apoplectic symptoms.

The use of turpentine in mælena has been recommended by Dr. Gordon Jackson of this city. The rationale of its employment has reference to its styptic qualities and its power of promoting the alvini discharges.

You will find, in the *Lancet*, an account of the exhibition of the bicarbonate of soda, employed by Billiard in a very curious case of blue secretion from the skin; this bore considerable resemblance to melanosis, and had a very offensive smell.

Another discovery, which has been disputed between Dr. Murray and another gentleman, is the apparatus for removing atmospheric pressure from the bodies of cholera patients. This idea seems to be connected with a notion of Dr. Barry, respecting the influence of atmospheric pressure on the circulation, or with the doctrine of derivation of blood from internal to external parts. A far more valuable improvement is the hydrostatic bed of the celebrated Dr. Arnott. By means of this bed, an equal support is afforded to every part of the body, and we are put in possession of a powerful means of averting bed-sores, of which you have seen several instances in the hospital, and may remember the case of a little girl who had a troublesome stiffness of neck from her unavoidable position in bed. I have here to remark to you, that those sores are found where you could not anticipate; that is, in parts not exposed to pressure. When a patient, in the advanced stage of fever, gets one or more bed-sores from pressure, the con-

stitution appears to acquire a tendency to form similar sores. We had a patient, some time ago, who had several bed-sores; at last he began to complain of pain in the soles of his feet, particularly the heels. I had the foot well soaked in warm water, and peeled off the thick cuticle of the heel, and discovered underneath a well-marked bed-sore.

Dr. Henry, of Manchester, has discovered the disinfecting power of heat in contagious diseases. This discovery has (with very little justice, I believe) been claimed by Mr. Wallace, as he only speaks of heat as an assistant, and not as the sole means. Now, gentlemen, you are all aware that since the time that washing of foul linen became a separate profession, heat has been universally employed as an assistant. Dr. Henry has shown, that by exposing infected clothing to a dry heat of 200°, all infection is completely destroyed; and this may be accomplished without spoiling the articles experimented on. He has also proved that cowpock can be volatilized, without being destroyed, at a temperature of 140°. While on this subject, I may mention an interesting experiment lately made in Germany, with respect to cowpock; it was found that by taking the blankets which covered a small-pox patient, and putting them on a heifer, cowpock was produced, which in its turn communicated vaccinia to man. This experiment reconciles the anomaly of one disease protecting against another, and is a great triumph to Dr. Thompson of Edinburgh, who always suspected, but was not certain of, their identity.

There are, gentlemen, many other discoveries to which, from the lateness of the hour, I can only allude very briefly, as the use of pepper frictions, in cases of internal inflammation, by Dr. Hancock; the employment of nitric acid, in tooth-ache, recommended by Dr. M. Ryan of London; and Dr. Corrigan's remarks on the injurious effects of digitalis, in permanent patency of the aortic valves.

The subject for our next lecture will be the pathology and treatment of periostitis.

severe, the surgical wards of the *Hôtel Dieu* are filled with numbers of individuals who have received burns more or less severe. Old women, covered with rags, return in the evening to their confined dirty garrets without chimneys, after having taken their accustomed doses of wine or brandy, and place, either under themselves or under the covering of their beds, chafing-dishes, or stoves, filled with lighted charcoal; the heat, the spirituous liquor they have drank, and the fumes of charcoal, asphyxiate them, or throw them asleep; the fire spreads to their clothes, and frequently, when they are roused by the pain, or when any one goes in to their assistance, it has already advanced so far, that the whole surface of the body is converted into one wound. Porters and other domestics, who are forced to sit up late, fall asleep under similar circumstances, and suffer in the same manner. Old men, leaning over their stoves, the tubes of which they embrace with their knees, fall into a kind of coma; their clothes are burnt, and along with them the integuments, muscles, and aponeuroses down to the bone. Other individuals, overcome with wine or with fatigue, fall asleep in their chairs, close against a hot fire, and then fall into it. Those unfortunate persons, who are subject to epileptic fits, are attacked with a paroxysm of their disorder, and fall into fires, or into vessels full of boiling water, or some heated oily liquid, remain there an uncertain length of time, and are horribly mutilated. Young children, imprudently left by themselves for some time, approach too near a fire, and get dreadfully burnt. Coopers, working in wine-vaults, and passing into apartments full of alcoholic liquors, set fire with their lights to the collections of gas which have escaped from them, and fall a prey to a general conflagration. Sulphuretted hydrogen gas accumulates in *cabinets d'aisance*, which are badly looked to, seldom visited, and not ventilated; and the first person who goes in with a lighted candle sets fire to it, his clothes are burnt, and with them a more or less considerable part of his body. Lastly, attempts at suicide, by means of charcoal, considerably augment the number of burns. Generally, the unfortunate persons who make these attempts, place themselves close to the chafing-dish, or put it under their beds, and when convulsions come on, they roll upon the hot charcoal, and are burnt in a frightful manner. Add to these causes a multitude of others, equally accidental or unexpected, such as fires, or those accidents which happen to persons occupied in certain trades, such as blacksmiths, metal-founders, glass-blowers, brewers, &c. &c., and we shall not wonder at the prodigious number of burns which every year present themselves at the Parisian hospitals, and especially at the *Hôtel Dieu*.

The organic lesion, denominated a burn or scald, is always the effect of the concentrated action of caloric on the living tissues. It is to the nature of this cause that this sort of

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## CLINICAL LECTURES,

DELIVERED AT THE

HOTEL DIEU, IN PARIS,

During the Session of 1832-3;

BY BARON DUPUYTREN,

PRINCIPAL SURGEON OF THAT HOSPITAL.

Corrected by himself.

—  
ON BURNS.

GENTLEMEN,

EVERY year, but especially during severe winters, when the cold is more than usually

mischief owes its peculiar characters; characters which wholly prevent our confounding it with any other kind of injury. Burns are always the same, whatever be the part of the body affected, and they partake at once of the nature of inflammation, of wounds, and of disorganization.

But these effects of the action of caloric present three great differences, in respect to their intensity or their severity, according as the heat has radiated from greater or less distances, or has been communicated immediately by the direct action of the flame, which so many different substances are capable of furnishing, or, lastly, from the direct application of the ignited bodies themselves.

The pathological lesions, resulting from the radiation of caloric, are more or less severe in proportion to its intensity and duration. Heat, moderate, but continued, thickens the epidermis considerably, renders the cutis hard, blunts its sensibility, and gives a brown tinge more or less deep: such are its effects on persons habitually exposed, from their business, to the heat of the sun's rays, or to that of vast fires, like blacksmiths'. It is known that some blacksmiths can, with impunity, touch and handle, with their rough and horny hands, iron highly heated or even red. It is also this thickness of the epidermis, natural or acquired, and this blunted sensibility of the skin, which confers on those men who pretend that fire will not injure them, the capability of supporting, with the aid of certain illusions, a very considerable degree of heat.

A more intense degree of heat causes on the skin different shades, irregular and mottled, and chaps or ruptures of the cuticle; from whence frequently result ulcers, which are difficult to cure. These are what may be observed on the anterior surface of the legs of old men who sit all day long by hot fires, and on the legs and thighs of women who make constant use of stoves, or of uncovered vessels containing fire.

A still more active degree of heat, whether on account of the quantity of caloric emitted from the burning body, or from its nearness, may produce all the phenomena characterizing the first, and even the second, class of burns. We have seen women who, after coming in from the cold, had put very hot stoves under their dress, have, at the end of a few hours, the posterior and internal surface of the thighs covered all over with blisters.

Exposure to the sun sometimes produces severe burns, especially in hot climates. Cases are recorded of individuals who, from sleeping in the open air, have had several parts of the body burnt by the heat of the sun's rays. A violent inflammation came on, followed rapidly by mortification, and they died on the fourth or fifth day.

As to flame, gentlemen, not only does it burn instantaneously, in the manner of ignited substances applied immediately to parts, but also it easily disposes animal substances to

take on that action of combustion of which it is itself the product. Submitted to the immediate influence of flame, animal substances dry up quickly; they boil as it were, become horny, and soon consume, producing a new flame, which, added to the first, increases its activity and extends its ravages. We know with what frightful rapidity burning clothes communicate the destructive effects of fire to great depths in the parts which they cover; the injury is often at the highest degree of severity, and death is most commonly the consequence of it. It is not uncommon even to see consumed in a few hours the whole body of an individual stupified with drunkenness or apoplexy, or of young infants who are unable to move away from the fire.

It is to this class of causes that we must attribute the burns produced by the combustion of certain gases, and, in particular, that of hydrogen gas, by the explosion of the boilers of steam-engines, and by the detonation of gunpowder. In general, these gases produce only superficial burns, but very extensive ones, since they act at the same instant on large surfaces. However, we sometimes meet with burns of this kind which penetrate deeper than the cutis.

The severity of a burn will vary also according to the physical or chemical properties of the bodies ignited or saturated with caloric, which are immediately applied to the living parts, that is to say, according to their peculiar nature, their density, their capacity for the principle of heat, and the facility with which they part with it. Thus all boiling liquids do not scald with the same force, because they do not all boil at the same temperature. It is on this account that the scalding action of broth, oil, fat, and tallow, is much more energetic than that of water. But another cause for this difference consists in this, that those oily liquids, from their nature, adhere to the skin over which pure water would only glide. If it be true that strong acids and concentrated solutions of the alkalis, heated to ebullition, produce injuries much more severe than other liquids, it must, without doubt, be attributed to the circumstance of their greater condensation and consequent greater capacity for caloric.

Solid bodies produce deep burns, if their combustion is very rapid, as is that of phosphorus, sulphur, and the resins in general. In the contrary case, the intensity of their effects is proportioned to their degree of heat, to the duration of their contact, and to the degree in which the tissues themselves are disposed to be affected by heat. *Ceteris paribus*, a burn is less deep when it takes place on parts habitually exposed to the air, than when it affects parts which are always covered with the clothes, and the epidermis of which is very thin.

For the reasons we have given, it follows that the action of fire, according as it is weak, or of momentary duration, powerful or long continued, excessive, or of very long duration,

has for its general effects, either a simple inflammatory irritation, which tends of its own accord to resolution, or an inflammation which must necessarily terminate in suppuration, or lastly, the complete destruction of the vital properties, and the death of the parts. It is under this general point of view that authors have regarded these injuries, in order to divide them into a greater or less number of classes. Thus, some, and among these Fabrice de Hilden and M. Boyer, reckon three classes, which we shall presently describe; others, among whom are Heister and Callisen, describe four; a writer of the present day admits but two, and divides all burns into those with inflammation and those with immediate disorganization.

In all these divisions, regard has been paid only to the intensity of the symptoms of the burn itself, considered generally, without taking into consideration the nature of the organs which are the seat of it, or of the tissues attacked or destroyed. Nevertheless, it is evident that the heat always attacks the skin first, and then extends its effects to variable depths, and, in succession, to still greater ones; that it is precisely on account of this depth that the three orders of phenomena present themselves which we have just enumerated; and that consequently, if we wish to establish a classification of burns according to just ideas and exact principles, we should take for our basis the different kinds of organs which have been submitted to the action of caloric.

It was from these considerations, that we long since adopted another classification, dividing burns into six degrees, which are thus characterized:—1st, erythema, or superficial inflammation of the skin without the formation of vesicles; 2nd, cutaneous inflammation, with separation of the epidermis, and the development of vesicles filled with serum; 3rd, destruction of part of the thickness of the papillary body; 4th, disorganization of the whole of the skin, as far as the subcutaneous cellular tissue; 5th, conversion into eschars of all the superficial parts, and of the muscles, for a distance, more or less great, from the bones; 6th, carbonization of the whole of the thickness of the burnt part.

The first degree is generally produced by the action of radiant caloric, or by the impression of hot vapours; or, lastly, by the application of bodies more or less hot. The parts then present a lively redness, not circumscribed, analogous to that of erysipelas, which the impression of the finger causes to disappear for the moment; the patient feels a smarting pain, which lasts as long as the affection. Frequently, at the end of some hours, and always after a few days, the redness, heat, and pain disappear, and the inflammation terminates by a desquamation of the cuticle.

However slight may be this sort of burn, it is not uncommon to see, when large surfaces are affected, the pulse rise and become frequent, the tongue grow red, and the symptoms

of gastro-intestinal irritation develop themselves. When the head is the part affected, the irritation may extend to the brain, producing watchfulness, delirium, convulsive movements, and even death.

The second degree is always attributable to a cause more energetic, or of which the action has lasted longer than in the preceding case. A lively pain, sharp and burning, is felt, and sometimes at the same time, but most frequently at the end of some hours, there forms on the burnt surface one or more phlyctenæ filled with a clear and limpid serum; the pain then becomes tense. The phlyctenæ burst, or are opened artificially; the serum flows out; the detached cuticle dries up, and some days after, falls off in large pieces, or in scales, exhibiting the rete mucosum covered again with a new cuticle, as yet reddish, thin and slight.

Sometimes the cuticle, instead of forming vesicles, is torn off at first, and detached from the rete mucosum, which remains exposed. The most lively pain is the result of this accident, which is always followed by a slight suppuration. But at length the denuded surface dries up, and soon nothing remains but a redness, which disappears, scarcely leaving any traces.

The cauterization of the rete mucosum, and of the papillary surface of the cutis, which constitutes the third degree of the injuries we are discussing, is announced by the presence of gray, yellow, or brown stains, thin, pliant, and insensible to a slight touch, but under which, on pressing a little harder, a pain is felt more or less severe; these stains are formed by rete mucosum deprived of its vitality. The blisters, which frequently cover the parts disorganised to this degree, generally contain a serum, brownish, milky, or strongly tinged with blood, and this appearance becomes, at first sight, an useful diagnostic sign. In these cases, sometimes the eschar is detached in a piece at the ordinary period, sometimes it falls off in little pieces, so as to expose, upon the parts covered by the phlyctenæ, ulcerations more or less extensive, but superficial, the cicatrices of which, without being drawn up, will nevertheless almost always continue apparent, because of the white dense and shining bed which takes the place of the destroyed surface of the skin.

It is to this degree that most burns produced by gunpowder belong, the scars of which are coloured black by the impression of the materials of the gunpowder, and are on that account easy to distinguish from those produced by other causes.

Under whatever form this sort of burn first presents itself, at the end of a few days, the pain, which had been relieved after the first twenty-four or forty-eight hours, returns with severity; an inflammation becomes developed, the eschar separates, is detached, and falls off, and the wound soon dries up, leaving the cicatrix of a dead whiteness, such as we have just spoken of.



This is the place to establish the principle, that in all burns the pain is always lively, but that it is much more intense when the skin is burnt only at its surface than when it is destroyed to some depth, and this fact is very important in forming the prognosis.

When an ignited body remains applied during a considerable time upon a part, a lively pain is the effect; but this pain ceases immediately on the removal of the cause. The cuticle, the rete mucosum, the whole thickness of the skin, and sometimes also a slight extent of the subcutaneous cellular tissue, are killed and reduced to a deep eschar, yellowish or blackish, dry, insensible to the touch, and hard and extensive in proportion to the depth of the colour. The surrounding sound skin is puckered, and is, as it were, shrivelled; the radiated folds which it forms round the burnt part indicates the degree of *raccomissement* which it has undergone. At the end of three or four hours, the pain revives, an inflammatory circle forms round the eschar, which separates in general between the fifteenth and twentieth day; the bottom of the wound corresponds to the subcutaneous cellular tissue; the suppuration furnished is very abundant; granulations spring up vigorously. Such are the characters of a burn in the *fourth* degree.

But here a phenomenon may be remarked which is, in a manner, peculiar to burns, and which no other kind of wound, attended with loss of substance, exhibits in so great a degree, and that is the force with which the circumference of the wound is drawn towards the centre; whatever be the separation of the edges, they incessantly tend to come in contact. It is this tendency of the organic power which causes all those vitiated forms of cicatrization which frequently bring on, besides disgusting deformities, impotence or inutility of the parts affected, but which a well-directed method of treatment may always counteract. These results never take place when the burn affects the posterior parts of the trunk, because the movements of flexion, which are the most natural, oppose themselves to that which the cicatrization would do by approaching. The same observation is applicable to the limbs, according to the part occupied by the burn.

Burns of the *fifth* degree scarcely differ from the preceding one, except that they reach more deep-seated parts, and may be followed by extremely severe results. The eschars which comprehend the fasciæ, muscles, and tendons, and in the midst of which we sometimes meet with vessels and nerves which have resisted the disorganizing action of the fire, are sonorous, black, friable, depressed, and take a longer time to be detached. When they are soft, or occasioned by boiling liquids, they present a grayish, insensible mass, which may be pressed down by the finger without any pain being produced. The suppuration is much more abundant, and the cicatrix in which the motor organs themselves have been com-

prehended remains misshapen, adherent, and renders the parts ever after immoveable.

The characters which distinguish the *sixth* degree are the most easy to recognize. The limb is then carbonized on its surface, hard, insensible, sonorous on percussion, easy to be broken under the efforts which tend to bend it, and the eschar on being detached leaves a stump more or less irregular, according as the fire has reached the different organic elements at different depths. MM. Roche, Sanson, and Begin, cite, in their excellent works, the case of a young man who, while running through a foundry, put his foot into a trench, through which the fused metal was to pass; the melted metal reached it, and he dragged out of this stream a limb which was deprived of the foot and the lower part of the leg. He had scarcely felt any pain, and did not at first perceive the horrible mutilation he had experienced.

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#### MEDICAL SOCIETY OF LONDON.

Monday, December 10th, 1832.

DR. WALSHMAN, VICE-PRESIDENT, IN  
THE CHAIR.

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#### TETANUS.

MR. BRYANT informed the Society, that the child, whose case he related at the last meeting, was recovering. He ascribed the cure to mercury.

Dr. Whiting placed more reliance on tartarized antimony and croton oil than on large doses of opium, or the other remedies usually employed. He had given opium in the fullest doses, but without benefit.

Mr. Proctor considered that opium was highly beneficial in some cases, and he instanced one of a spasmodic kind, in which large opiates effected a cure.

A Visitor observed, that, according to his experience, when tetanus continued several days, recovery might be expected.

Dr. Walshman said, that he was once the subject of tetanus, and was attended by many eminent medical friends, but all their remedies failed. He then took fifty minims of the *vinum opii* at a dose with immediate relief, but the spasms returned, when he again removed them by the me-

dicine. He had found it equally successful in numerous other cases.

Dr. Ryan begged to inquire whether Dr. Walshman's case was tetanic or neuralgic, and received an answer that it was the former. He (Dr. Ryan) considered this information highly important in a practical point of view, and also as it corroborated the successful cases cured by morphia, and recorded in the foreign journals. He had seen the disease both in hospital and private practice; and in some instances observed temporary relief afforded by opium. He did not think that any known remedy could succeed in the most violent form of the disease.

Mr. Kingdon expressed some degree of surprise at Dr. Walshman's statement, and hoped that others might find it equally efficacious. He alluded to the discrepant opinions on the nature and treatment of the disease, and stated, that Mr. Abernethy mentioned in his lectures, that whenever he succeeded in opening the patient's bowels, recovery happened, and when he failed, death took place. His favourite purge at one time was one grain of calomel and five of jalap. Mr. Kingdon then described the value of tartarized antimony in every form of inflammation, but could not agree as to the propriety of exhibiting croton oil in large doses.

Mr. Gossett mentioned, that some cases were cured, in Guy's Hospital, by opium and bark, and by bark and arsenic. He was disposed to agree with Dr. Whiting.—*Adjourned.*

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#### LINNÆAN SOCIETY.

December 4, 1832.

A. B. LAMBERT, ESQ., IN THE CHAIR.

SEVERAL candidates were elected, and others proposed. A notice was read of the occurrence of a beautiful species of thrush, new to this country as a British bird, and very nearly allied, both in size and plumage, to our well-known missel thrush. This bird was

shot by Lord Malmsbury, in a furze-field, near Heron's Court. The communication was made by John Curtis, Esq. The reading a further portion of Professor Essenbeck's botanical paper concluded the business of the evening. The meeting was fully attended, and among the members present were Mr. Burchill and Lieut. Holman, the blind traveller.

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#### HORTICULTURAL SOCIETY.

December 4, 1832.

A PAPER was communicated by the author of "The Domestic Gardener's Manual," on the growth and uses, in this climate, of the Zea Mays, or Indian corn, and some notes upon Chinese chrysanthemums, by Mr. Donald Munro, the Society's head gardener. The observations on both these subjects were interesting, and will be found serviceable by the cultivators of the plants.

Six Lectures on Botany are intended to be given in the summer months, according to the plan hitherto adopted.

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#### GEOLOGICAL SOCIETY OF LONDON.

December 5, 1832.

RODERICK IMPEY MURCHISON, ESQ.,  
PRESIDENT, IN THE CHAIR.

THE Rev. J. C. Stapleton, of Highclere, John Forbes Royle, Esq., and Robert Hudson, Esq., were elected Fellows of the Society.

A paper by Gideon Mantell, Esq., F.G.S., was read, on the Saurian Remains found by the author, at various times, in Tilgate Forest, Sussex, but more particularly on a new animal belonging to the same tribe, and lately discovered by him. The paper was illustrated by an extensive series of specimens, including the recently found reptile, and numerous drawings.

## ZOOLOGICAL SOCIETY.

*December 6, 1832.*

JOHN HAMILTON, ESQ., VICE-PRESIDENT, IN THE CHAIR.

THE minutes of the last monthly meeting were read and confirmed. Nineteen candidates were elected, amongst whom were the Earls of Stair and Yarmouth, Lord Viscount Ranelagh, Sir A. Halliday, N. N. Rothschild, and others. The Report of the Council, read by the Secretary, stated, among various details, that the balance in hand, on the 30th of Nov., after the monthly receipts and payments, was 517*l.* 4*s.* 8*d.*, and the number of visitors to the gardens, 4424.

It was announced that Dr. Grant, Professor of Zoology at the London University, would give an extended course of lectures to the members of the Society, in Bruton-street, on the structure and classification of animals. These lectures will commence on the 15th of January. The Report also stated, that the Council, convinced by the experience of the last two years, that the Society contained among its members men of high rank in science, both at home and abroad, and referring to the printed proceedings in proof, had under consideration a plan for the publication of Transactions, with plates, on a scale commensurate with the varied materials and resources of the Society. The donations to the library, museum, and menagerie, were numerous and valuable. Two new by-laws were confirmed by ballot, and the whole business of the meeting appeared to give great and general satisfaction.

## WESTMINSTER MEDICAL SOCIETY.

*Saturday, December 8th, 1832.*

J. T. PETTIGREW, ESQ., F.R.S., PRESIDENT, IN THE CHAIR.

## LITHOTRITIC INSTRUMENTS.

ON the 23d ultimo, a paper was read by Mr. Costello on a new curved percussor, which he had invented, which, for strength and safety, he contended was unequalled. He said he had operated with it in the presence of a hundred medical gentlemen. He raised several objections to that invented by Baron Heurteloup, not on theoretical but practical grounds; and he communicated his sentiments to the Academy of Sciences of Paris. Some members of the society advocated M. Heurteloup's instrument, and declared that Mr. Costello's was a mere copy. After much angry discussion, it was resolved to request Baron Heurteloup to attend an early meeting, and to exhibit his instrument. In accordance with this request, the Baron attended this evening, and, as he was unable to address the society in our language, he requested Mr. Burnett to read his memoir, which contained a sketch of the origin and progress of lithotrity, but which was by no means candid towards M. Civiale. He produced sixty different instruments of his own invention, and gave a sketch of the claims of several lithotrits. He also presented his percuter as an original invention, and strongly denied that it was a copy of Weiss's instrument, as stated by Mr. Costello at a late meeting of the society, and also in two letters to the Academy of Paris. He showed the mode of operating with it, and said that he had used it on the living subject, in the presence of Sir Astley Cooper, Mr. Brodie, and many other eminent surgeons. He proposed that six members of the society should favour him by witnessing

the operation on a patient in the early part of next week.

Mr. Costello replied, that he was most anxious to have the proposed commission of the society appointed, as he would most positively prove, that the newly invented instrument was not original, and that his own was the best. He hated personalities, as this mode was disreputable to men of science; he was willing to be judged by facts and facts only.

The President observed, that it was contrary to the objects of the society to entertain the proposal for a commission, as they were not to decide who was the inventor of instruments. — (*Hear, hear!*)

Mr. Walker then exhibited Weiss's original instrument, which certainly bore the closest resemblance to the Baron's and Mr. Costello's. He said that Mr. Weiss had left it unfinished, as Mr. Brodie had advised him to abandon it.

Some very personal remarks were then made on a case, treated by Mr. Costello, in which the terms "inexact," "untrue," "false," were employed. These remarks we decline to publish, as the friends of the society and the contending parties; and we deeply regret that discussions of a scientific society should be conducted in such an unworthy and objectionable manner.

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#### THE MARCH OF PROPER PROFESSIONAL FEELING IN FRANCE.

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IT is really *refreshing* to turn to the splendid homage paid to professional zeal and integrity, by the Paris Academy of Medicine, in the choice of a *membre titulaire*, on the 27th ult. The candidates, all worthy members of the profession, were Drs. Andral, junior, Bricheveau, Chervin, Damiron, and Emery: — the first of these gentlemen adding to the just claims which have placed him among the *élite* of the Paris physicians, the suffrages of the *Faculté de Médi-*

*cine*, of the quarantine party, of which Dr. Pariset (the Pym of Paris) is the Coryphæus, and consequently the suffrages of the ministry *Doctrinaire*. Well, who, against such a current as this, has been elected? Dr. Chervin, a gentleman whose name is perhaps less familiar to the profession at large, but who has rendered services incalculable to communities, to medical science, and to the commerce of several countries, by Herculean labours, for many years, in investigating, personally, and in different parts of the globe, all points connected with the alleged contagious property of yellow fever. An idea may be formed of the extent of this gentleman's labours by glancing over the question of the contagion of yellow fever in the *Cyclopædia of Practical Medicine*. To the astonishment of all those who had been so long accustomed to see merit arrested by the intrigues of party, 49 independent members have now placed Dr. Chervin in a position likely to secure, more effectually, advantages to the cause of truth. To *Pariset et Compagnie* of France this blow is not likely to prove more severe than to our *grand maitre* and his celebrated valet.

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#### CERTAIN ANATOMICAL LECTURERS SUMMONED BEFORE THE SECRETARY OF STATE.

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SINCE our leading article was in type, we received information that the Secretary of State has summoned certain Anatomical Teachers of the large schools to appear before him on Friday 14th instant. This corroborates our opinions as expressed in this day's leader, and shows the wisdom of our sagacious contemporary. Will this worthy ever learn common liberality?

## THE

**London Medical & Surgical Journal.***Saturday, December 15, 1832.*

## THE WORKING OF THE ANATOMICAL BILL.

It appears, from numerous communications which have reached us since our last, that some of the public, and most of the private medical schools in the metropolis are unsupplied with subjects. This is to be attributed to the unceasing exertions made by the teachers of anatomy and the demonstrators of the large schools, in canvassing the parish officers in every quarter, and by their obtaining promises of supply, in consequence of urging the many strong claims the hospitals and public medical schools have upon the public. It is not the operation of the new act that throws any impediment in the way of the private teachers of anatomy, but the difficulty arises on account of the canvassing we have described, and in consequence of the prejudice and partiality entertained by the parochial authorities for the influential medical officers of hospitals and other institutions.

One of our contemporaries censures those students who cannot prosecute studies, in consequence of the want of subjects, for holding a meeting to memorial the Secretary of State for the Home Department, requesting him to enforce the anatomical act impartially. For presuming to attempt this fair and legitimate object,

the memorialists are sneered at, and told they belonged to a private school, in which their number is not more than a dozen. Unfortunately for this veracious statement, the number of signatures is near a hundred; and the man who hazarded the assertion addresses an auditory which seldom exceeds half a dozen. But he belongs to a *large* hospital school (Lord save the mark!), and hence the cause of his spleen against private establishments, which so seriously injure his associates, the real promulgators of genuine medical knowledge. We need scarcely observe that the age of humbug in medical teaching has passed by; or that the hospital schools have lecturers appointed through private interest, and not on account of superior acquirements; and therefore intelligent students will no longer be led by the names of hospitals, but resort to rising and rival establishments, where they find teachers whose scientific attainments and unwearied exertions enable them to oppose, successfully, the stupid drones of the large institutions, many, indeed most, of whom are doting drivellers, whose doctrines are a century behind the present state of medicine; while the younger portion are, in general, a set of unprincipled plagiarists, who give the opinions of others, both foreign and national, as their own, without the slightest acknowledgment. Let any man versed in medical literature peruse the published lectures of many of the teachers in the large schools, and he will find them replete with puerilities and common-place trash

that would disgrace a student of six months' standing. It is no wonder, therefore, that some of these teachers should object to the publication of their lectures; and should oppose their rivals in private schools, whose whole success depends upon the value of their instructions, and upon the moderate terms which they offer to students, while their zeal and attention to the pupils, their readiness at all times to explain doubts and difficulties, are encouragements which their rivals of the large schools are too haughty to afford. We know instances, at this moment, of students of the large institutions who are attending private schools, and who declare that they derive much more information than they had enjoyed elsewhere. Besides, we may add one other argument in support of this position, and it is this, that the majority of the ablest and most popular of our public teachers were private lecturers—the Hunters, Baillies, Denmans, Bells, Guthries, Brodies, Lawrences, Quains, Mayos, &c. &c.

The senseless opposition, therefore, to private schools is foolish, unjust, and absurd. Who does not know that some of the most learned and best-informed teachers in London, Edinburgh, Dublin, and Paris, are private lecturers; but that their exertions should be arrested or paralysed by jealousy and unfounded prejudice, is highly disgraceful to their fellow-labourers in the ample field of their common science.

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PROFESSOR GRAVES'S LECTURES.

WE direct the attention of our readers to the valuable lectures of Professor Graves, the first of which we publish in this number. These lectures evince a degree of research, a depth of judgment, and a mass of information, seldom seen in clinical teaching. They are not filled with paltry, insignificant truisms; there is nothing in them to excite the loud laugh that speaks the vacant mind, but every sentence is replete with the most valuable instruction. We shall continue their publication until the whole are on record. We beg to add, that the learned Professor has kindly corrected our reports of them himself.

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MEDICO-BOTANICAL SOCIETY.

EARL STANHOPE, PRESIDENT, IN  
THE CHAIR.

December 11, 1832.

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THE minutes of the last meeting having been read and signed, various presents were announced; among which was a beautiful specimen of the skeleton of the *datura stramonium*, presented by Mr. Iliff.

Dr. James Johnson and Mr. Judd were then elected fellows of the society.

Sir Anthony Carlisle, in the course of some remarks, then observed, that, four years ago, he made some observations to the society, in the form of a letter, which had been printed and distributed; one of these accidentally falling into the hands of a gentleman, travelling for a highly respectable firm in the city, then in America, had induced him to communicate, to Sir A. Carlisle, information to the follow-

ing effect: Hydrophobia is very frequent in the province of Señora, in the Gulf of California, in consequence of the Spanish custom of keeping great numbers of dogs, which run wild, and also from the multitude of wild jackalls in that part. There is, however, a reputed remedy for that direful malady, one possessed long since by the aborigines, and adopted by the Spanish settlers, who testify to its good effects. It is not recommended as a preventive of the malady, but as a cure when it has really shown itself, and it is stated to be of unvarying efficacy. The gentleman, when he returned a second time from America, brought with him some of the remedy, and a drawing of the tree; the latter Sir A. C. showed to Mr. Brown, of the British Museum, who considered it to be of the genus cactus, no one species of which, he informed Sir A., was poisonous. The Spanish name of the tree, from which the remedy is obtained, is *haco*, on account of its long spines, which are used in making combs. The remedy is the expressed juice of the succulent branches, and of this Sir A. has received three quart bottles, one of which burst by a species of fermentation, and another being preserved and hermetically sealed, Sir A. is desirous of retaining in his own possession. He considers it proper that a trial should be made as early as possible, and is willing to attend with any professional gentleman, who may have the care of a case of hydrophobia, whether in private or hospital practice, to superintend its administration, according to the directions he has received. In the province of Señora, the vulgar opinion, which obtains in England, is also prevalent, that a person, bitten by a rabid animal, when affected with hydrophobia, possesses the power and the will to bite others, and communicate the disease; a strait-waistcoat, therefore, of the most simple kind, is immediately applied, that is to say, the patient is buried up to the neck in sand, two ounces and a half of the juice are then forced down

the throat, and convulsive struggling, with foaming at the mouth, follow. These may depend, however, on the difficulty of swallowing a fluid in the sand-bath. The patient becomes more convulsed, followed by profuse perspiration, stupor, and sleep; in twenty-four hours he is removed from the bath perfectly cured. The fluid is perfectly free from odour and aroma, and has a slight opiate bitter taste.

Earl Stanhope inquired whether Sir A. Carlisle considered the sand-bath necessary towards effecting a cure?

Sir A. Carlisle said, that the sand-bath is not an essential condition, but merely the ordinary mode of restraining the patient; cases having been cured in which the strait-waistcoat was employed.

Professor Burnett made some remarks on the genus cactus, to the effect that the plants of this natural genus are not deleterious.

Earl Stanhope stated, that in consequence of the indisposition of Mr. Everett, the scientific professor of chemistry, he would be unable to lecture.

Dr. Sigmond, one of the secretaries, read a paper by Mr. Abraham Booth, containing a description of an improved process for preparing raw sugar, by evaporating the juice of the sugarcane in vacuo; also a paper by Dr. Hancock, on the *paco*-plant, on the falls of Essequibo. It commenced with a botanical description of the plant, which is aquatic, and forms the pasture for the paas, a species of fish which frequents the rivers of Guiana. The expressed juice of the palmato leaves is bitterish and mucilaginous, and is considered useful and efficacious in affections of the urinary apparatus.

The meeting then adjourned to the 8th of January, 1833.

**NEW CONTAGIOUS DISEASE IDENTICAL WITH CHOLERA.**

**BY CONTAGIOSISSIMUS.**

**TRUTH** will ultimately prevail. The virulently infectious nature of cholera will, at last, be universally admitted; and the members of our Boards of Health will then receive the reward so well merited by their arduous and patriotic exertions: their disinterested assiduity in disposing of the public money, and unwearied benevolence in taking care of the poor, have not yet been duly appreciated.

The object of the present letter is to draw the attention of the profession to an affection, which, like cholera, certainly depends on a specific virus, strangely and whimsically dis-

seminated. Nay, the more we examine the facts, the more we are convinced that it is merely a variety of that distemper. Both are observed to rage in the same place, at the same time. The one does not ensure against the other, nor does one attack of either prevent a second. In both there are watery evacuations, violent pains in the belly, vomiting, and a remarkable change in the volume of the body. The resemblance, in truth, is sometimes so striking, that the one is not unfrequently mistaken for the other. Whether they are really distinct diseases or not, I, however, leave to the infallible judgment of the different Boards, and only contend here, that **PREGNANCY** is not less contagious than the Asiatic cholera.

*The following parallel between the two fully demonstrates the truth of my assertion.*

**CHOLERA.**

Is propagated in defiance of winds, seasons, and climate. It is found under the scorching sun of India and among the Russian snow.

Its infection, whether communicated through the air, or otherwise, is said not to spare the lower animals.

Its spreading frequently follows the march of soldiers.

Appears sometimes in vessels at sea, and spreads after their arrival in port.

Has attacked individuals after sudden electrical changes.

May affect several in a family, or but one.

Never seizes some persons, though exposed to all its known causes; sometimes does so after a very long exposure.

Attacks some, no one can imagine how.

Breaks out in quarantine stations. Medical men and old nurses generally escape.

Pregnancy, we see, is governed by the same laws, and is therefore equally contagious with cholera. Let Boards be appointed, and well paid, to investigate the subject, and I doubt not but their conclusions will be as impartial, scientific, and just, as those lately promulgated. We may then have sug-

**PREGNANCY.**

Is propagated in defiance of winds, seasons, and climate. It is found under the scorching sun of India and among the Russian snow.

Its infection, whether communicated through the air, or otherwise, is said not to spare the lower animals.

( . . . . . illæ (equæ)  
Ore omnes verse in Zephyrum, stant russibus altis

Exceptantque leves auras, et sæpe sine ullis Conjugiis, vento gravidæ, mirabile dictu!

*Virgil. Georg. iii. 273.)*

Its spreading frequently follows the march of soldiers.

Appears sometimes in vessels at sea, and spreads after their arrival in port.

Has attacked individuals after they had been under the influence of animal magnetism (at Berlin.)

May affect several in a family, or but one.

Never seizes some persons, though exposed to all its known causes; sometimes does so after a very long exposure (ten or twenty years after marriage.)

Attacks some, no one can imagine how. (The virtuous ladies attacked while their husbands were absent at the crusades.)

Breaks out in nunneries.

Medical men and old nurses generally escape.

gestions on the subject not inferior in profundity of remark and elegance of diction to those of Dr. Abercrombie on Cholera. We shall then have laws and regulations rivaling those which lately conferred so much happiness, security, and prosperity on our country.



PROCLAMATION OF THE CENTRAL  
BOARD OF HEALTH THAT EPIDEMIC  
CHOLERA IS NOT CONTAGIOUS!!!

"After death, the doctor."

WE think that, on a question of vital importance to communities, the respectable part of the profession cannot be insensible to our efforts in exposing the inconsistent and insane policy of the juntas of this metropolis, misnamed Boards of Health. What we have now to offer, as honest caterers for the public, gives the *coup de grace* to the whole system of humbug so long, unhappily for humanity, suffered to be tolerated.

Our readers recollect, no doubt, that, before the mischief arising out of false doctrines was discovered to recoil with such force upon our commerce, the most strenuous endeavours were made to propagate, through every possible channel, the opinions (unsupported as they certainly were by any thing like evidence) of our Russian cholera missionaries, to whom places were given afterwards among the *Centrals*. It will be remembered how our first sapient Board actually recommended that marks should be affixed to the doors of houses containing cholera patients, the isolation of the sick, &c &c How, in the anxiety of our chief quarantine personages to make an early impression on the public mind, they, good men, obtained a place in different newspapers of the day for the famous "*meditations*" and opinions of those profound philosophers and faithful, though ill-paid chroniclers, Russell and Barry, written so near at home as Calais, when on their return, on the 6th December, last year; the burden of those meditations being to the effect, that the contagious principle of cholera was so very subtle in its nature that, to have an attack of the disease, it was not even necessary to be near a patient, as the germs of the disease might be wafted, both from persons and ships, to an indefinite distance through the atmosphere. All which, as was plainly

to be seen by the clear and simple statements of Dr. Lefevre, physician to our embassy at Petersburg, as well as by those of others in Russia, was a most perfect specimen of *fudge*. It cannot already have been forgotten how, subsequently, amidst certain occasional out-breakings of truth, put forth (but too late to effect good) with the prospect of bettering our commercial relations, then sadly hampered, gentlemen of great experience in India, and other places, were not employed as district inspectors (not even that upright and truly scientific physician, Dr. Hamett, our cholera commissioner at Dantzic), *their* fidelity to the honour of their profession and the cause of truth having been tested. Let it be borne in mind too, that in the "*papers*" emanating from the *Centrals*, through the medium of that precious production the "*Cholera Gazette*," and separately, we are reminded of the necessity of avoiding communications with the sick, or even with the "*suspected*," which "*may endanger the lives of thousands*:"—that the period of separation between a sick person and persons in health need not, indeed, exceed *twenty days* from the date of convalescence—that purifications by gases, by baking articles of dress, by the services of troops of "*steady white-washers*," &c. &c., should be carried into effect, according to the most approved rites and mysteries of the great philosophers of quarantine, in matters relating to contagion. It was moreover duly impressed upon the public mind by our sages, as a reference to documents said to be published under *authority* will show, that, on the death of a cholera patient, the body was not to be washed—not to be taken into a church, nor attended by many people to the grave, but "to be wrapped in the clothes in which they may have died, and deposited, as soon as possible, in a well-fastened coffin [!!] carefully pitched within." It seems quite established that the pitching and fastening not having been always duly attended to, some fortunate cases

of resuscitation, if not of resurrection, took place throughout the country; but there is much reason to apprehend that horrors unutterable have in many instances arisen, not only during our epidemic, but in America, purely from the panic-creating counsels of persons in this country, whom we would, in all sincerity, recommend to employ any time which may yet be allowed them in imploring forgiveness and making their peace with Heaven.

In the mean time, gentle reader, how, think you, does the case stand now? Now, after relative has been seen to abandon relative, friend abandon friend; after communities have risen to obstruct intercourse; after the abandonment of sick on the high way, and other abominations certainly never expected to occur in such a country as this, and from which France was saved by the noble conduct of a band of honest medical men of Paris, who resolved *not to suffer* truth to be perverted:—how, we repeat, does the case stand now, as to the question of contagion and our friends the Centrals? Take, in reply, the following extracts from a letter, quietly issued by them on the 6th ult., and as they say, “submitted, by the desire of the Lords of the Council, to the favourable consideration of the Governors of the several public hospitals in London.”

“That it has been proved that cholera was not found to spread amongst the other patients in the public hospitals in which some cases of that disease were treated during the late epidemic.

“That, under these circumstances, it becomes matter of consideration, important to the public health, whether sporadic cases of cholera might not be admitted into the public hospitals, in the same manner as cases of any other disease.

“The Central Board of Health, therefore, under the full conviction that the cleanliness, ventilation, and general good arrangements established in the public hospitals of the metropolis, and found sufficient to prevent

the spread of typhus fever, recommend the adoption of the above suggestions with reference to sporadic cases of cholera; a measure in favour of which humanity would plead irresistibly, in the event of any cases of that disease occurring, and being carried to the door of the hospital as the only place of refuge, after the breaking up of the local Boards of Health and their parish hospitals.”

(Signed)

“W. MACLEAN, Sec.”

We can now well fancy our readers exclaiming *Credat Judeus!* and that this must all be a mere hoax. We can assure them, however, that, though wondrous strange, it is quite true; the extracts above given having been made from a copy perfectly official and authentic. We must leave our readers to the reflections which the whole history of general or Central Boards of Health in London must now give rise to. We cannot trust ourselves at present to comment at large upon the flourish now made by these cronies about humanity, the shocking thing of a patient being refused admission into an hospital, which, if said twelve months ago, *as it well might upon the fullest evidence*, would have prevented a world of mischief. Had the question been wrested at once, as it was in France, out of the fell gripe of quarantine people, the true course to follow, in alleviating the sufferings of thousands of human beings, would have been fixed long ago. At present, all this comes too late to do much good; and, indeed, in the event of another explosion of cholera hereafter, in our time, we believe that little impression could be made on the mass of the public, whose prejudices have been so basely taken advantage of and pandered to on the late occasion, even though members of Boards should agree to act henceforth with integrity.

REMINISCENCES  
OF AN  
ARMY MEDICAL OFFICER.

PART I. CHAPTER V.

LET me next describe the aspect and bearing of others among these distinguished preceptors, having made the preceding attempt upon the *triumvirate* Monro.

Dr. Home (James, I mean; for Francis, of *materia medica* fame, had placed himself *hors de combat* before I arrived to his assistance) began the duties of the day at the hour of eight, — rather too early for the depth of winter in a northern latitude; and although I delighted in the style and matter of his compositions, so purely, as to attend them a second time, unnecessarily, and to write them copiously as well as fairly out, in nine thick volumes, after the manner adopted with regard to the *prælectiones Jacobi Gregorii*, I could hardly bear to hear him. He had an indomitable hawking in his throat, which, notwithstanding the incessant application of digits to labia (when the paroxysm came on), to ears like mine, was any thing but *euphonic* or *cadenic*. Here let me observe, that I have been a musician from early infancy; and from

“Whistling aloud to keep my courage up,”  
when a schoolboy,

“With satchel on my back \*,”

I rose to the eminence of composing marches, waltzes, and other fanciful things for our regimental band while on foreign service. Judge, therefore, of the blister which I sat upon during my attention to the study of *Materia Medica*!

Gregory took post at nine, immediately after Home, whom I must declare to be a learned philosopher, well versed not only in medical lore but medical practice. I forgive him the interminable clearing out of the

*glottis* or *larynx*, in consideration of his admirable instructions, which, had they been placed in the hands of a Gordon \*, or some others (whom I shall have occasion hereafter to name), would have been devoured by the audience with avidity.

Gregory was a tall man, six feet at least, as far as I can, at this distance of time, record. He had a stoop in his walk, and was altogether ungainly in his gait and *aborde*, as the French style it, but this was totally eclipsed by the glories of his intellect †.

The doctor had travelled on the continent when obstacles did not oppose themselves to youth of family or fortune in so doing. In my time the case was altered; but to this I shall more particularly allude on a future occasion.

He had rather a thick enunciation, though a fluent and often rapid delivery. He spoke well extemporaneously, and his written (indeed he generally read) productions were perfection. It was said of him, that he would have filled any chair in the University, excepting, perhaps, that of divinity; but this implied no reproach upon his character, even as a religious man, having allusion only to his being of the episcopalian persuasion, whereas the professor of divinity must be a presbyterian clergyman.

Dr. Gregory joined to his own natural genius and talents the great advantage of being the son of a most accomplished father. This was the author of the *Lectures on the Duties and Qualifications of a Physician*, the first distinct work, I believe, ever published in this country, devoted exclusively to professional morals and conduct; or, in other words, to the subject of *medical ethics*. He is also popularly and most deservedly esteemed for his celebrated “*Legacy to*

\* De quo postea.

† It was with Dr. G. that the serjeant of the volunteers (among whom Dr. G.'s loyalty induced him to enrol himself) lost his temper, swearing that he would rather drill a hundred *fools* than one *philosopher*.

\* Vide Blair's “*Grave*.”

his Daughters." It is not so generally known, that the affecting apostrophe which forms the conclusion of Beattie's beautiful poem, *The Minstrel*, commencing thus,—

"Art thou, my Gregory, for ever fled,  
And am I left to unavailing woe?"

was written upon receiving the account of his sudden death, an event which occasioned the abrupt termination of the poet's interesting progress.

But to return to my preceptor. He always lectured with his hat on, a departure from usage which was explained by the circumstances of a large window, with a northern aspect, being behind him, and his being peculiarly susceptible of inflammatory attacks. He wore his own hair, which was thin.

It is well known that he possessed an inexhaustible fund of humour peculiar to himself. When I waited upon him for the purpose of becoming his pupil, a personal acquaintance of the doctor's accompanied me, to whom he introduced two children (boys in petticoats, who were romping about the study), saying—"Did you ever see my twins, Mr. —? Here they are, as like one another as two peas," &c. A few years ago, happening to be at Paris, I was asked by an old Edinburgh acquaintance, and brother officer, to dine with him *tête-à-tête*, but, on arriving, I found a third gentleman in the room. Our landlord stated, that it must be quite unnecessary to introduce him to me, although I protested that we were utter strangers. I was desired to look at him, which I did, without becoming a whit the wiser as to his identity. The host seemed to enjoy my embarrassment, but still persisted in suppressing the name. The stranger, however, had shortly occasion to speak. He no sooner opened his lips for that purpose than one of the most striking illustrations of family likeness, and hereditary peculiarities, burst upon me, which I ever met with, equal at least to Dr. James Gregory's own remarkable one of the Scottish Chan-

cellor's great grandson\*. I immediately exclaimed "you are the son of Dr. Gregory, and must be one of the twins." He acknowledged that it was just so, and informed me, that the other *Pea* was then practising at the Scottish bar, he himself being an Edinburgh doctor, recently dignified, and trying to amuse and improve himself, before settling in his native country, by seeing something of what might be going forward elsewhere. I may add, that I have seldom spent a more agreeable evening, though we were not all cotemporaneous, in the professional sense of the word.

At ten o'clock, Dr. Hope's crowded class of chemistry assembled, in what may, without any great degree of slander, be denominated a dungeon, as the lecture-room, at that time, formed part of the original building, though surrounded for many years by fine specimens of modern architecture. Few require to be told, that the re-edification of the University had been ventured upon without counting the cost, and, after having proceeded a certain length, became the prototype of the Thames Tunnel. The stones and columns, of recent adjustment, absolutely acquired a covering of verd antique (though not by oxidation, perhaps), and had not parliamentary grants been annually furnished for the completion of the magnificent design, would ere now, in all likelihood, have gone into a state of decay, like Kew Palace. †

Of the operations and proceedings in the subterranean laboratory, I shall speak in my next.

\* Related by the Professor, when lecturing upon gout.

† The University has, however, been completed, for many years, although not exactly according to the original plan. It does credit to the Athenians of the 19th century.

CEREBRAL IRRITATION, METASTASIS  
OF ASTHMA, RETURN OF LATTER,  
CURE.

BY JOHN SWIFT, ESQ.,

*Surgeon, Dublin.*

MASTER N., aged about 14 years, of spare delicate habit, high complexion, and subject to attacks of asthma, returned from school on the 2d of June, 1831, in his usual state, and without any obvious symptom of deranged health. He slept, however, badly, and complained of frequent paroxysms of coughing, which, with his ordinary asthmatic affection, had been very prevalent for the past fortnight. He stated also, that, for some time back, he had been annoyed by a painful sensation in the abdomen, which he could not particularly describe. Next day he returned from school in the same state. He walked out in the evening with his mother, and was frequently observed to laugh and talk incoherently; but as he had at all times, though a quiet steady boy, given indications of an imaginative turn of thought, his manner did not excite much attention. He complained of slight indisposition and some head-ache, and remained awake for a long time after retiring to rest.

I was called to see him on the 4th, about two o'clock P.M., and found him lying in bed, reading. He had head-ache; and I observed that the circulation and the temperature of the skin were increased; but attributing these symptoms to lying in bed in a very close room during hot weather, I paid but little attention to the case, and only recommended him to walk out into the air. He rose some time afterwards, walked out, and expressed himself much relieved; the rest of the day he amused himself in reading. I learned that he had taken, the night before, some blue pill with pill. rhei comp., and on the next morning a dose of sulphate of magnesia, which

produced one evacuation, the nature of which I could not learn, but was informed, on inquiry, that his bowels were regular.

On Sunday, the 5th, he went to prayers, and walked about town, still complaining of head-ache and hot skin. His tongue appeared foul, and there was still arterial excitement, but nothing like decided feverishness. In the evening his manner attracted much notice, and he was repeatedly checked for indulging in fits of laughter, which were produced by the most ordinary circumstances and remarks, and appeared to be in a great degree involuntary. About an hour after going to bed, I was again called to see him. He complained of severe head-ache. The pain had slight intermissions, and was felt sometimes in the temples and sometimes at the vertex, and in the direction of the cerebellum. His skin was extremely hot, and his pulse quick and jerking. His respiration was accelerated, but the cough and asthmatic symptoms had entirely disappeared. His tongue was foul, and he complained of thirst and frequent calls to make water, but there was no pain in any part of the abdomen. His feet felt comparatively cold. I ordered his temples to be bathed with spirits and water; and finding he had no discharge from his bowels, gave him five grains of blue pill and ten of pill. colocynth. comp., to be followed by a dose of Rochelle salts in the morning. During that night he bled from the nose to about two or three ounces, and next morning had two copious discharges of loose faecal matter, of a very fetid smell, and intermixed with dark green and blackish scybala. He slept the greater part of the day, and towards evening eat heartily. He made no particular complaint during that day, but remained awake the whole night, and had frequent fits of involuntary laughter as before.

On Tuesday he rose at nine o'clock A.M., and breakfasted in his room. His pulse was calm and his skin cool, but some head-ache still re-

mained, and his tongue was foul. Soon after coming down stairs, he was seized with immoderate fits of laughter, talked of battles and feats of generalship, tossed the chairs about, and began to brandish a poker over his grandfather's head. He drew a quantity of soot from the chimney, with which he blacked his face and hands, and jumped about the room in fits of continued laughter. He tore all the books that came in his way, and scattered the fragments about the floor. At noon I saw him, and observed the increased sensorial excitement, incoherence of speech, and fits of almost uncontrollable laughter still continued. He was directed to take five grains of the submur. hydrargyri and twenty-five of pulv. jalapæ immediately, and to have his temples leeches. On this day I observed (what before escaped my notice) that the action of the carotids was extremely full and strong, and that I had never felt them of equal volume, even in cases of severe inflammation of the brain or its investments. Towards evening he had one very copious discharge from his bowels, loose, fœtid, and blended with dark scybala as before. The laughter, incoherence, and insomnia continued until five o'clock on the following morning, when, as usual, he fell asleep, and did not awake until two in the afternoon.

Next day (Wednesday) he took nearly an ounce of the sal. rupel. and had a large motion of the same character as before, mixed with portions of viscid mucus. The incoherence and laughter were diminished, and I had, for the first time, an opportunity of examining the abdomen satisfactorily. On every former occasion this had been totally impossible, for as soon as I touched him, he contracted the muscles of the abdomen, and broke out into fits of irrepressible laughter. There was some pain on pressure in the region of the descending colon, and in the right hypochondrium a degree of fulness, but no pain. He took that night submuriat. hydr. gr. vj.; pill.

colocynth. comp. gr. x.; to be followed next morning by the usual saline purgative.

Thursday 9th, four very copious evacuations. The first scybalous, black, and fœtid; the second and third much improved and less offensive; the last devoid of any fœtor and nearly of the natural colour and consistence. The laughter, head-ache, and incoherence had now disappeared, and his manner was as gentle and steady as before his illness. He took on that afternoon hydr. c. creta, gr. xij.; pulv. rhei scrupulum zingib. gr. vj.; which produced two natural motions; and his usual healthy condition of mind and body being now completely restored, I directed a purgative to be taken occasionally, and discontinued my attendance.

He continued in apparent good health, with a very sharp appetite, up to the 30th of June, when the head-ache, heat of scalp and face, throbbing of the carotids, and insomnia at night, again returned. In the interval between this and his last illness he had taken every other day a dose of rhubarb and magnesia; his appetite was very great, and his bowels opened generally twice a day. I understood also, that he had been to a gymnasium and had taken a great deal of exercise, principally on the circular swing. He complained greatly of heat and itching on his head, which he washed with cold water. Some aloetic pill and salts were given to him, and I saw him again on the 1st of July. The former incoherence, laughter, and strong pulsation of the carotids had returned; he had slept scarcely any on the two past nights, and frequently rose to make water. He was immediately leeches behind the ears, and had a blister to the neck, which rose well, and took submur. hydr. gr. sex; jalapæ, ℞j., which produced two motions, partly loose, partly figured, but all remarkable for their fœtor and bad colour. A strong mustard pediluvium was ordered to be used every night, and to have his feet (which were at all times

cold) covered with very warm woollen stockings. He remained awake until six o'clock in the morning, and passed, during the night, several copious stools, which seemed to be composed of that kind of vitiated mucus which has been compared to rotten eggs, intermixed with loose shreds of a very offensive smell. The next day (July 2nd) he had a large dose of calomel and colocynth pill, which produced figured motions of a dark colour and firm consistence. On the 3rd he got hydr. c. creta, gr. xv; rhei, ʒss. followed by two large vitiated mucous discharges. He was now becoming more quiet and rational, and the lower extremities felt as warm as the rest of the body, while the heat of the head and pulsation of the carotids declined. On the 4th, the pulv. rhei was repeated. On the 5th, 10 grains of the pill colocynth comp. were administered; and on the 6th, a large dose of rhubarb and magnesia. The latter was followed by several loose stools, without fœtor and of a good colour. He slept this night, and on the 7th, passed a soft, figured, natural evacuation. The pulsation of the carotids became rather slower than it is usual to find them at his age; there was an uniform moisture over the surface, and health and sanity again returned.

On Friday the 29th of July, symptoms of another attack appeared, but much diminished in violence. He had, for the last month, used the mustard pediluvium constantly. Strict attention had been paid to his diet, and a habit he had of swallowing his food in a half masticated state nearly corrected.

The usual symptoms of incoherence, &c. began on Friday and continued until Sunday, when they disappeared. He was freely purged as before. About the 26th or 27th August he experienced another slight attack, which was treated as the former. On the third night, his asthmatic affection, which had been absent for the last four months, re-appeared. From that period, up to the date of this

paper, he has had no return of the cerebral affection, and enjoys a good state of health.

## Hospital Reports.

ST. THOMAS'S HOSPITAL.

### RHEUMATISMUS ACUTUS.

EMMA DAY, a servant, of sanguineous temperament, was admitted, October 25, into Mary Ward, under Dr. Elliotson. Had been ill two weeks: at the time of her admission, she was tormented by severe pains all over her, but which appeared worse in her arms and legs, accompanied with slight febrile symptoms. She also complained of pain and giddiness in her head; had also a slight attack of bronchitis; sonorous rattle heard in the chest; cough, and slight dyspnoea. The whole surface of her body is covered by a thick rash, which somewhat resembled urticaria when it first makes its appearance. This, she states, came this morning upon her skin, and attributes it to her coming from a warm bed into the cold, to the hospital, previously having kept it two weeks. Tongue white; bowels regular; pulse quick and full. These symptoms were first preceded by heat of skin, languor, thirst, and no appetite; heat of skin then succeeded by profuse perspirations. For about a week before her admission, she continually felt sick, and vomited occasionally, and had pain about the abdomen. The pains about the body and legs relieved by heat. Catamenia regular.

25. *V. S. ad* ʒxiv.

*Vin. cochl* ʒss. *ex. mist. camph. ter die. Slops.*

26. Much better; all the symptoms relieved, but still complains of pain in the head; bowels freely open from the medicine; tongue not so white; pulse nearly the same as yesterday; blood buffed.

*V. S. ad lb. j. Pergat. addend. aqua loco mist. camph.*

27. All the pains have entirely left her; feels giddy and very weak; if she attempts to sit up in bed, she faints; tongue more natural; pulse feeble, 80; blood buffed.

28. Much better. Has been walking about the ward all the morning.

30. All the symptoms have entirely left her. Feels perfectly well; therefore Dr. Elliotson discharged her for Thursday, and she went out accordingly, November 1st.

PARIS ACADEMY OF SCIENCES.

November 19, 1832.

AMONG the prizes awarded at this meeting were the following:—

1st. To Israel Robinet, workman, for the substitution of the action of a machine for that of the human lungs, in glass-blowing, 8000 francs. By means of this valuable invention, the health of the glass-blower will in future be preserved, and the product of his manufacture greatly improved, both as regards accuracy of form and the capability of making articles of greater dimensions than was formerly possible.

2d. To M. Thilorier, for a new air-pump, in which the exhaustion is effected by a process solely hydrostatic, without the aid of valves, stop-cocks, or any other moving piece of mechanism, a medal, value 300 francs. The principle on which this ingenious instrument is constructed, is that of rarefying the air by means of the vacuum which is formed at the upper extremity of a barometric tube.

3d. To M. Pixii (fils), for an electro-magnetic apparatus, a medal, value 300 francs. It is well known, that the first observation of the electric spark, obtained by means of the magnet, which has completed the analogy between the effects of a magnet and those of a galvanic pile, was made by Mr. Faraday. But this experiment could not be repeated rapidly, because

it was required to overcome the attraction of a magnet with a piece of iron, with which it was placed in contact, by a rather violent effort. M. Pixii, by causing a horse-shoe magnet to revolve opposite a horse-shoe of soft iron, round which is wound a conducting wire, making a great number of turns, has obtained in this wire an electric current giving sparks, shocks, and decomposing water. As this current changed its direction at each half turn of the magnet, he has found a means, by employing an electro-dynamic balance, to give it a constant direction; and has thus separately obtained the two gases resulting from the decomposition of water, and a more rapid decomposition.

NECROLOGY.

DEATH OF SIR JOHN LESLIE.

THIS distinguished individual died at his seat of Coates, in Fife, on the 3d ult.: he had attained the 67th year of his age. Sir John Leslie was a native of Largo, in Fife. He was educated at the University of St. Andrews, and had many struggles before reaching the eminent situation he latterly held. He acted at one time as travelling tutor to the sons of Mr. Wedgewood, the celebrated potter, and enjoyed a pension of 300*l.* a-year on that account as long as he lived. In 1805, after a severe conflict with the clerical powers of the city, by whom he was objected to on a charge of infidelity, he was appointed Professor of Mathematics in the University of Edinburgh. Here he distinguished himself by some important discoveries, particularly the process of artificial congelation. He was, however, a man of immense general information and high literary powers, in addition to all his acquirements as a philosopher. In 1820, he succeeded the celebrated Playfair as Professor of Natural Philosophy; and some time in the present year he received from his Majesty the honour of a knighthood of the Guelphic order. By an unvarying prudence of conduct, Sir John Leslie is believed to have accumulated about 20,000*l.* The vacant chair, the emoluments of which are about 700*l.* a-year, has since been offered to Sir J. F. Herschel, but declined. It is generally believed that Sir David Brewster will be next in the choice of the patrons, who are the Magistrates of Edinburgh. The class is in the meantime taught by Mr. J. S. Russell, a young but highly promising individual.



## BOOKS

A Treatise on the Urethra, its Diseases, especially Stricture, and their Cure. By BENJAMIN PHILLIPS, author of a Series of Experiments on Arteries, &c. 8vo. pp. 319. A plate. London. 1832. Longman and Co.

This work contains the most graphic and correct account of the causes and treatment of stricture in our language. The author has introduced the simple instruments of M. Duchamp, which alone ought to be employed for the removal of stricture. One of these is so constructed, that caustic can be exactly applied to the stricture, an improvement which every one must acknowledge, for the plan of introducing the common caustic bougies was quite atrocious. We strongly recommend this work to our readers.

Outlines of a Course of Lectures, explanatory of the Principles and Practice of Medical and Operative Surgery. By WILLIAM AUCHINCLOSS, M.D., Member of the Faculty of Physicians and Surgeons, Glasgow. 8vo. pp. 60. Glasgow. 1832.

The fullest syllabus of surgical lectures we have seen as yet.

Official Correspondence on the Subject of Spasmodic Cholera in Ireland. Dublin, Pettigrew and Oulton. 1832. pp. 74.

Medical Botany; or Illustrations and Descriptions of the Medicinal Plants of the London, Edinburgh, and Dublin Pharmacopæias; including a popular and scientific Account of Poisonous Vegetables, indigenous to Great Britain. With figures drawn and coloured from nature. By JOHN STEPHENSON, M.D., F.L.S., Graduate of the University of Edinburgh; and JAMES MOSS CHURCHILL, F.L.S., Member of the Royal College of Surgeons, and Fellow of the Medico-Botanical Society of London. New Edition. Edited by GILBERT T. BURNETT, F.L.S., M.B. R.I., R.C.S., Professor of Botany in King's College, London, and to the Medico-Botanical Society, Churchill, London; MacLachlan and Stewart, Edinburgh; Hodges and Smith, Dublin. Part III. pp. 16. Four coloured plates.

\*.\* We are happy to perceive that the re-publication of this valuable work progresses well, as Jonathan would say.

Contribution to a Natural and Economical History of the Cocoa-nut Tree. By HENRY MARSHALL, Deputy Inspector-General of Army Hospitals. Edinburgh, Carfrae and Son. Longman and Co, London, 1832. pp. 30.

History of the Glasgow Royal Infirmary. By Dr. M. S. BUCHANAN. Embellished with Four Views of the Hospital, and illustrated by 20 statistical tables. Published in aid of the Funds of the Infirmary. Glasgow, Lumsden and Son; Black, Edinburgh; Longman and Co., London, 1832. quarto. pp. 88.

The Edinburgh Medical and Surgical Journal for October, 1832.

Essay on Tubercles. By NATHANIEL ROGERS, M.D. Senior President of the Hunterian Society of Edinburgh, Corresponding Member of the Medico-Chirurgical Society of Dublin. Edinburgh, 1832. pp. 20.

## LITERARY INTELLIGENCE.

DR. BOOTT is preparing for publication, in two octavo volumes, to be published in January, a Memoir of the Life and Medical Opinions of Dr. Armstrong, late Physician of the Fever Institution of London, and author of Practical Illustrations of Typhus and Scarlet Fever; to which will be added, an Inquiry into the Facts connected with those Forms of Fever attributed to Malaria and Marsh Effluvia.

## NOTICES TO CORRESPONDENTS.

*An Apprentice* at Ramsbury has not seen any of the late numbers of this Journal, or he would not have put us to the expense of postage, by inquiring if we intended to give more than one Course of Lectures.

*Amicus*.—The snarling of such curs is too contemptible to deserve our notice.

*A Military Medical Officer* is much too pugnacious. He well knows that our time is fully occupied with various pursuits, and that we cannot answer every letter addressed to us. If he reflected for a moment, he would know that we are not inclined to treat the subject with neglect; and that it is impossible to insert many articles, as these are frequently excluded by the printers in making up. How often do they exclude Lists of Books, Notices to Correspondents, &c. for want of room!

*Crito*.—Who cares a rush about the parties, or their very silly effusion?

*B*.—The less said on the subject, the better. We know that the statement was literally true, and if a similar communication is received by the *Lancet*, the writer will repent it, and so will his friends.

Amount of Subscriptions already received, in aid of Dr. Ryan . . . £166 13 6

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## LECTURES

ON THE

## PRINCIPLES, PRACTICE, &amp; OPERATIONS OF SURGERY,

Delivered at the University of London,

SESSION 1832—1833,

BY

PROFESSOR SAMUEL COOPER.

LECTURE XII., DELIVERED OCT. 29, 1832.

GENTLEMEN,

LAST Thursday evening, amongst other subjects, I endeavoured to explain to you the principles, which are to guide you in opening abscesses. I mentioned, that, when phlegmonous abscesses, or such as arise from acute healthy inflammation, are superficial, and the progress of the matter to the surface is not likely to be retarded, you may sometimes dispense with the plan of opening them, and allow them to burst of themselves. On the other hand, I specified several descriptions of abscesses, in all of which it is advisable and necessary to make an early opening, that is to say, as soon as fluctuation can be detected, or even sooner, if the presence of matter can be ascertained by other circumstances, when that symptom does not exist, or is indistinct. I observed, that abscesses, situated under fasciæ or tendinous expansions particularly require an early opening to be made, because those structures greatly retard the progress of the matter to the surface. When they happen to lie between the abscess and the skin, and there is no opening for the escape of the matter, it will spread widely, and cause great mischief; the rule is therefore to make an early and free opening. I next mentioned, that when the abscess presses upon important parts, as when it is seated near the urethra, near the

pharynx, or, under the skull, upon the dura mater, in fact, when it is situated very near or upon any important organ, whose functions are likely to be dangerously affected by its pressure, the matter should be evacuated immediately its pressure is detected. Then, when the pus is situated amidst loose cellular membrane, in which it may burrow or spread to great extent by its gravity, as when an abscess has formed under the superficial fascia of the neck, whence it may descend in the loose cellular substance down even into the chest, I recommended, that an early opening should be made for the evacuation of the pus: I extended the same advice to the generality of abscesses situated near any mucous duct or passage. In many of these cases, if the circumstances should be urgent, the opening should be made, directly the fluctuation is perceived, or even sooner, if the existence of pus in the part should be rendered sufficiently clear by other indications. I wished you to remember particularly the two leading principles which ought to guide you in the selection of an advantageous place for opening; the first being to choose that part in which the abscess is inclined to point, as there the pus is nearest to the surface, and the parts to be cut through are thinnest; yet this rule, or principle, as explained, must frequently yield to a second one, which is still more important, namely, that of fixing upon a part in a sufficiently depending situation, in order that the matter may escape freely by its own gravity. Fistulæ are frequently the result of making the opening too high. I then considered the size of the opening required under different circumstances, and the necessity of preventing it from closing prematurely. I also explained, that one opening might not be found sufficient, but that another, generally termed a *counter-opening*, might be indispensable.

Gentlemen, you will remember that I likewise explained the difference between the terms *fistula* and *sinus*, which, although they are sometimes used synonymously, strict speaking, have different significations; for a *sinus* has no external opening, and commu-

nicates only with the main cavity of the abscess; while a  *fistula*  is a long canal leading from an abscess to some external opening, by which the matter is occasionally and incompletely discharged. A sinus arises from the pressure of a too abundant quantity of pus upon the surrounding loose cellular texture, there being no opening for it to escape with sufficient readiness out of the body.  *Fistulae*  generally come on in consequence of the opening in an abscess having been made so high, or being in other respects so situated, that the matter cannot easily be discharged from it; the passage soon becomes lined with a texture very like a mucous membrane; it loses all disposition to heal, in consequence of the matter draining through it from time to time, without ever being completely evacuated; it becomes, I may say, gentlemen, a kind of excretory duct to the abscess. These are the common circumstances under which  *fistulae*  form; but there are other causes producing them, as, for example, the lodgment of a foreign body, or portion of dead bone, which, when attended with suppuration, if it be not removed, will inevitably lead to the formation of a  *fistula* .

Now, gentlemen, as sinuses are usually formed in consequence of there not being an adequate and timely opening made for the escape of the matter of an abscess, an obvious indication in the cure must be to make a sufficient outlet, and then the sinuses will generally heal of themselves. It is on the same principle that we treat  *fistulae* ; for if an opening be made ample enough for the ready escape of the whole of the confined pus, and the hindrance of its future lodgment, they will generally heal in a short time. Sometimes, however, when, by altering the position of the part, the matter can be made to escape with facility, or when, by pressure, we can effectually discharge the matter, and excite adhesive inflammation, a cutting instrument may be dispensed with. When a  *fistula*  cannot be cured by any of the means I have mentioned, that is, by making a free opening, by pressure, or by altering the position of the part, we occasionally try the effect of stimulating lotions or injections; but, ere they can be safely employed, the abscess must have taken on an indolent character; in fact,  *fistulae*  do not deserve the name until they are perfectly chronic. When no other method will answer, introduce a director into the  *fistula* , and open it freely. If the  *fistula*  should have been produced by the presence of a foreign body in the part, I need scarcely say it must be removed.

Then, gentlemen, I must observe, that after you have opened an abscess, you ought not to squeeze it in the painful manner adopted by the surgeons of former days. If the opening be made sufficiently large, the matter will escape freely enough with very little assistance. There may, indeed, be cases in which a little pressure may be necessary, as when there are clots of coagulable lymph to be discharged,

which will not so easily pass out as more fluid matter.

After as much of the pus has escaped as will readily flow, you may then apply the poultice again. You should not cram the abscess with lint, as was the custom some years ago; it is, indeed, frequently necessary to introduce a small bit of lint to prevent the opening from closing again, because an abscess which has been opened to-day may, in consequence of adhesive inflammation, be closed by to-morrow, and require opening again. To keep the wound from healing thus prematurely, it is requisite, for a day or two, to introduce a small bit of lint between its edges. This plan is particularly necessary when the abscess is of the acute kind, deeply situated, and there is reason to expect that the formation of matter will continue to be for some time rather copious.

When the abscess has lost the acute form and become chronic, a bandage may be a most important means of cure; then, instead of poultices, we use common dressings and a roller, or a roller and compress. The bandage promotes the commencement of the adhesive inflammation in the cyst of the abscess, in lieu of the suppurative; it tends to prevent lodgment of pus; it holds the opposite sides of the cyst nearer together; and, on all these principles, tends to bring about not only the obliteration of the main cavity of the abscess, but of all  *fistulae*  and sinuses connected with it. In some cases, we also make use of astringent lotions.

Gentlemen, with regard to the method of opening abscesses with caustic, it is accomplished by rubbing the skin over the abscess with potassa, either alone, or combined with quick-lime; you rub the part till it becomes brown, after which an eschar is produced, which in a few days separates, and leaves a chasm, which, however, is sometimes not deep enough to extend to the abscess and let out the matter; so that, after all, it may be necessary to use a cutting instrument. This method is never advisable for acute abscesses: there are small collections of matter, surrounded by a great deal of indolent hardness, in which caustic is recommended; but, even in these cases, I should generally prefer expediting the process of suppuration, and the removal of the hardened circumference, by means of the compound galbanum, or some other moderately stimulating plaster, or the nitrate of silver, employed according to Mr. Higginbottom's plan. I may add, that the method of opening abscesses with caustic is tedious, for it is some time before the eschar separates. It is objectionable on another account, which is, that it produces a loss of substance, and consequently an ugly scar. Such disfigurement is, indeed, in some parts of the body, of little importance; but, on the face or neck, especially in females, it is to be considered as a circumstance that ought always to be avoided. Gentlemen, you will meet with a certain description of buboes, or abscesses in the groin, the matter

of which undermines the skin very much, the integuments being in a diseased state, and indisposed to unite to the subjacent parts. In such instances, many good practical surgeons prefer applying caustic, which at once destroys a considerable portion of the diseased skin, and makes a free opening for the evacuation of the matter.

Lastly, gentlemen, I will speak of the plan of opening abscesses with the *seton*. This is done with an eye-probe, or with a seton-needle. If you make use of the former, you first make a puncture with a lancet in an eligible situation, and then introduce through this opening the eye-probe, threaded with a skein of cotton or silk; the probe is to be pushed to the other extremity of the abscess, and another puncture is to be made at the point where the end of the probe is felt projecting. Out of this second opening, you draw the probe, followed by the skein of silk or cotton, which is to be left in the part. If a seton-needle be used, it should be narrower and longer than the common one, but I generally prefer the eye-probe. The principal reason for the use of the seton is, that it not only makes two openings, but secures their continuance as long as the skein of silk or cotton remains in them. The seton is not, however, much adapted to acute abscesses: chronic ones may sometimes be advantageously treated with it, because in them the parts sometimes have no disposition to heal, from want of action, and require stimulation to make the cyst granulate. The seton may be successfully employed in some conditions of lumbar abscess, where the tumour has been already a good deal reduced in size. Indeed, gentlemen, you will occasionally meet with abscesses, which are so indolent, and require so much stimulation, that not only will they admit of the employment of a seton, but absolutely require the skein of cotton or silk to be smeared with savine ointment, or some other stimulating preparation, in order to make the healing processes commence. You would not practise with judgment, however, if you were to employ setons much in the treatment of common abscesses; and the best surgeons in London, I believe, use them much less frequently, than their brethren in Edinburgh.

Gentlemen, as it is now time to conclude this subject of the treatment of abscesses, I will merely remind you of the necessity of always being attentive to prevent another accumulation of matter; and for this purpose, you should make it a rule to maintain the opening as long as you see that the matter is secreted in sufficient quantity to require a constantly ready outlet. On the same principle, you will form a counter-opening, if necessary; indeed, you must make as many openings as the circumstances of the case may demand, your main object being to prevent, by every means in your power, another lodgment of matter in the part.

Gentlemen, it does not follow, as a thing of course, that all antiphlogistic measures must

be discontinued immediately you have let out the matter: sometimes it will still be useful to continue them, in moderation. Here I am referring to the treatment of an acute abscess; because if it be a chronic one, as, for example, a lumbar abscess, the practice is to be conducted on entirely different principles; but, I repeat, that, with respect to acute abscesses, the antiphlogistic plan of treatment may still be beneficial for some few days after you have let out the matter. You should yet continue the poultices and fomentations, until the inflammation has subsided, and the discharge is considerably reduced; you may then relinquish such applications, and employ common dressings, the practice then becoming the same as that of ulcers in general.

In proportion as the inflammatory symptoms subside, the diet of your patient ought to be improved. When the discharge is considerable, and continues so for several days after the inflammation has subsided, you will soon find a tendency to *hectic fever* begin to show itself. It is surprising how soon hectic symptoms will come on after the subsidence of the inflammation, especially when no immediate prospect of a cure presents itself, the transition from inflammatory fever to hectic being then so sudden, as hardly to leave any intervening condition of the system between them.

Gentlemen, in the lectures already delivered, I have frequently had occasion to make allusion to what was termed by John Hunter the universal sympathy of the constitution with local injuries or diseases. This species of sympathy produces the fevers, with which surgeons have a great deal to do. Now, we cannot have inflammation of any extent in a part of the body without an immediate attack of sympathetic inflammatory fever; nor can we have a long continuance of severe local disease without having another kind of disturbance of the whole system, which, though weakened, still struggles against the local disease, from which it cannot immediately deliver itself. This latter kind of constitutional disturbance is well known, under the name of *hectic fever*, which Mr. Hunter very justly regarded as a sympathy of the whole system with a local disease, that has gone on beyond a certain period.

Well, then, whenever there is a local injury or disease of any extent or severity, we may expect the appearance of one of the foregoing fevers, namely, of the *sympathetic inflammatory fever*, in the early stages of the local disease, and *hectic fever*, which is also a sympathetic fever, when the local disease has continued for some time, and cannot be immediately cured.

I described the sympathetic inflammatory fever when speaking of inflammation, because it is, in truth, the fever of inflammation, and now I will consider hectic fever, because I have just been treating of suppuration, for we find that it is often one of the consequences of long continued and profuse suppuration. However,

it may come on without being preceded by any suppuration whatsoever, and therefore it is not exactly proper to name it the *suppurative fever*, as was formerly very common. It appears to be produced by the long-continued irritation of any severe local disease, whether suppurative or not. The irritation of a recent local injury, accompanied by acute inflammation, produces the sympathetic inflammatory fever: this is an *immediate* effect; but when the constitution has been in some degree reduced by the effect of a severe local disease that has existed a certain time, and which it cannot promptly get rid of, hectic fever is the result, and, in this view, it may be considered as the *remote* effect of the local disorder.

The sympathetic inflammatory fever is characterized by increased action, and every symptom of it indicates strength; the great feature of hectic fever is debility, and, as contrasted with the quick and acute nature of the other febrile disturbance, it is a protracted and chronic disorder.

The exciting cause of hectic fever is some local injury or disease, frequently a great or incurable one, and then the fever may be regarded as a hopeless struggle of the constitution to free itself from what is beyond the power of nature or art to cure. In numerous instances, we see the origin of both these constitutional affections exemplified in a bad compound fracture. The fracture is set, and the wound closed; but the injury has, perhaps, been more severe than was calculated, or there is something in the patient's constitution unfavourable to the cure; in consequence of which the wound will not heal by the first intention; inflammation begins and becomes extensive; the sympathetic inflammatory fever is severe; one abscess forms, is opened, and is followed by the formation of another, which is also opened, but others succeed;—all this time the original wound remaining disunited. The whole constitution sympathises with the local injury; as the limb becomes worse, the general health grows worse likewise; the patient gets weaker, and the pulse smaller and quicker than in common inflammatory fever. We are obliged to continue puncturing fresh collections of matter, one after another, the fracture remaining disunited; the discharge profuse, thin, and unhealthy; the patient reduced to the lowest state of debility; the adipose substance of the limb absorbed; its cellular membrane sometimes gorged with serum, and every part of it œdematous. Under these circumstances, the constitutional disturbance may assume a dangerous form, and compel the surgeon to amputate the limb, as the only means of giving the patient a chance of living. Now, the general indisposition of the early stage of such a case is the inflammatory fever, but after a few days, hectic symptoms commence.

Hectic fever comes on, however, at very different periods after the occurrence of the

local injury or disease. The more delicate the constitution of the patient, or the more severe and incurable the local disease, the sooner do hectic symptoms begin, and the more rapid is their progress. With respect to the degree of severity of the fever, I may say, gentlemen, that it depends also upon the structure and functions of the part affected: thus, hectic fever, produced by tubercles in the lungs, will come on sooner, and be more rapid and dangerous in its progress, than the same description of fever caused by a diseased joint. One interesting question, respecting hectic fever, is, how far it is essentially connected with suppuration? In the case of compound fracture, which we have been considering, I mentioned the repeated formation of abscesses; a statement that may appear to corroborate the opinion, that hectic fever is always preceded by suppuration. You will find, in a work of high reputation, namely, Dr. J. Thompson's Lectures on Inflammation, hectic fever is represented as invariably connected with suppuration, or the absorption of pus; but this doctrine cannot, I think, be successfully maintained; for we meet with many diseased joints, which, though unattended by suppuration, give rise, by their long-continued irritation, to hectic symptoms. We know also, that tubercles in the lungs, which have not reached the suppurative stage, may be accompanied by a similar constitutional affection. We see the same fact also exemplified in an especial manner in that disease of the spine, which was first so excellently described by Mr. Pott. The fact is, that the long-continued irritation of any local disease, whether attended with suppuration or not, may bring on hectic fever. The late Dr. Young, of St. George's Hospital, furnishes us with a proof of this fact, in what happened to himself when a young man; he had every symptom of tubercles in the lungs, and though they never suppurated, he had hectic fever in a severe degree. There are, undoubtedly, changes in the secretion of an abscess, which will produce hectic; and, we often notice such changes when a large chronic abscess has been opened, and the cyst has become inflamed. But, perhaps, under these circumstances, the hectic symptoms, or their aggravation, termed *irritative* fever, may not depend so much upon the altered quality of the discharge, as upon the inflammation of the cyst. Be that as it may, the state of the matter, in an abscess, is not the only cause of hectic fever, because we see that hectic will arise with or without suppuration, in any long-continued disease, especially if such disease be severe or incurable.

Gentlemen, it is hardly necessary for me to inform you, that when suppuration takes place, hectic-fever does not always follow, and it would, therefore, be quite erroneous to consider such constitutional indisposition as a necessary consequence of suppuration. In cases of ulcerated cancer, we may have little or no hectic; and this freedom of the system from

it may continue to a very late period of the local disease. Yet hectic fever, I allow, is most commonly preceded by suppuration, and for this simple reason, because the greater number of severe surgical diseases are accompanied by ulceration and suppuration. In many local diseases, not of a dangerous nature, a very copious discharge of matter may exist, without any symptoms of hectic fever: the discharge from an issue may continue for several months, or even years, without causing hectic; and need I remind you, gentlemen, that the discharge of pus from the urethra, in gonorrhœa, however long continued, however copious it may be, never excites hectic fever? But, in severe local diseases, we may expect hectic fever, after they have lasted a certain time, whether there be suppuration or not. As far as I can judge, little doubt can be entertained, that suppuration is not the only cause of hectic fever, the production of which implies severity, obstinacy, long continuance, or incurability of some local disease, disturbing the constitution.

As for the doctrine, that hectic fever is produced by the absorption of pus, it is not tenable for a moment; for if such fever can occur without suppuration at all, it may of course take place without any possibility of the absorption of pus. Gentlemen, I have explained to you, that the cysts of abscesses are both secreting and absorbing surfaces, and that, by the combined action of the arteries and lymphatics, there is a continual change taking place in the contents of every abscess; and it is not the same identical matter that lies in an abscess for many months in a perfectly stagnant unaltered state. Now, if absorption of pus were the cause of hectic, we ought to have this fever produced by every abscess, but this is contradicted by experience, for the pus, in an abscess, is continually being absorbed and secreted again, for a very long time, yet without any constitutional disturbance, resembling hectic fever, being necessarily occasioned by it. The doctrine referred to must, therefore, be renounced. In confirmation of these remarks, I may acquaint you with another fact, which is, that the matter of abscesses, both acute and chronic, is sometimes entirely taken away by the absorbents, yet without hectic fever being produced.

The symptoms of hectic fever are of the following kind: a frequent, small, weak pulse, the stroke of which, by its sharpness, indicates irritation; occasional flushings of the face; the palms of the hands and soles of the feet frequently very hot; the urine pale and copious; a readiness to be thrown into a perspiration; night sweats; diarrhœa; remarkable emaciation and weakness; the tongue seldom so much furred as in inflammatory fever, and sometimes it is moist and clean. Frequently you will notice a circumscribed redness of the cheeks, and, in persons of a fair complexion, this redness is terminated by an abrupt line. Generally in the hectic, produced by surgical dis-

eases, there is either loss of appetite, or impairment of digestion; but, in the hectic of phthisis, the patient will sometimes eat well to the last; yet, in this example, more or less flatulence, and other symptoms of indigestion, commonly prevail. In hectic fever, there is generally a considerable exacerbation of the symptoms towards the evening, mostly preceded by chilliness, which is followed by a burning heat and a mottled appearance of the skin. As the fever increases, the pulse increases in number, and, at the same time, becomes proportionably weaker; towards morning, the exacerbation is followed by a profuse perspiration, so profuse as to wet, not only the patient's shirt, but even the sheets of his bed, and he lies bathed, as it were, in a cold clammy sweat. In the latter periods of the disease, diarrhœa usually comes on, which it is very difficult to check, and then the night-sweats often subside. These diarrhœas and perspirations are often termed *colliquative*, because it seems as if the patient, who is in an alarming state of emaciation, were melted away in them. During the hot fit, the urine is pale and limpid; but, after the sweating stage, it deposits a sediment of uric acid. The approach of death is sometimes preceded by an œdematous state of one or both extremities. Here, gentlemen, if you please, we will stop, and I will begin the next lecture with the consideration of the *treatment* of hectic fever.

## LECTURE XIII.—DELIVERED OCT. 31, 1832.

## GENTLEMEN,

HAVING explained the symptoms of hectic fever, and the circumstances under which it arises and is maintained, I have in the next place to describe its treatment. Here you should remember the very plain and useful distinction which John Hunter made between a *hectic fever arising from a local disease, that is absolutely incurable, and a hectic fever produced by a similar disease, that is curable, if the constitution had sufficient strength, or could hold out long enough*. In the first case, there is no possibility of recovery; and all that you can aim at is to palliate the symptoms. This is the melancholy truth, when the exciting cause of the constitutional disturbance is itself irremediable. However, local diseases, which cannot be cured by external applications, or by internal medicines, and which would soon destroy the patient by hectic, if treated on the palliative system, may sometimes be completely removed by a surgical operation. Thus, when the knee, ankle, wrist, or elbow is affected with a disease, which has no chance of being cured, the part may be removed altogether by amputation: by this proceeding, the patient exchanges an incurable disease for a curable wound; a serious wound, it is true, but generally one that will not prove fatal, and may be healed. We see the same beneficial exchange

of an incurable disease for a curable wound in every instance where a diseased part, keeping up dangerous constitutional disturbance, is removed by a surgical operation. Some diseased breasts, various tumours, and certain organic affections of the testis are frequently removed, because they keep up hectic symptoms.

One grand axiom in surgery, that the cure of the disease requires the removal of the exciting cause, is here well illustrated. If a diseased joint produce symptoms of hectic, how can we expect such fever to be cured so long as the local disease continues? If copious and long-continued suppuration should give rise to hectic fever, how could we calculate upon the subsidence and relief of the hectic disturbance, while the suppuration is going on? Hence, if the fever depend on an incurable local disease of a part that is not removable, the case is without remedy, and all that we can do is to palliate symptoms: the pain of the local disease must then be appeased by every means in our power; opium must be administered, and, if the disease be one of a joint attended with suppuration, poultices and fomentations should be applied. Hectic patients will not bear topical bleeding, therefore we cannot have recourse to this means, even for a temporary increase of inflammation. On the contrary, the constitution must generally be supported by the use of light tonics, such as bark, the sulphate of quinine, calumba, or cascarilla, and by means of a light nourishing diet, and a moderate quantity of wine. Here a chief indication is to keep up the remaining powers of the system, because, as I have said, one distinguishing feature of hectic is debility. If the bowels should be loose, opium and the chalk mixture ought to be prescribed. Supposing hectic fever, however, to depend on a local disease, which would be curable, if the constitution could hold out, then the main indication must also be to support the strength of the system, and to lessen the irritation of the exciting cause: while, therefore, you employ every means to improve the condition of the local disease, you should administer such medicines and diet as will be most likely to support the constitution in its struggle. I fear that we have no medicine capable of communicating strength directly to the constitution: bark, which was once thought to possess such virtue, is now no longer considered to have this efficacy; it was formerly regarded almost as a specific for hectic fever as well as for mortification, but it does not now retain this kind of character. It is sometimes useful in improving the appetite and giving tone to the digestive organs, thus indirectly strengthening the system, but it has no specific virtue of imparting strength in proportion to the quantity of it swallowed and digested. If the bowels are quiet, we may give one or two grains of the sulphate of quinine, two or three times a day; and, for lessening profuse night-sweats, I know of nothing equal to diluted sulphuric

acid, except the cure or removal of the local disease itself. Quinine, therefore, in combination with diluted sulphuric acid, is, under these circumstances, an excellent medicine. You may give quinine, if you please, in the compound infusion of roses, which, you know, contains the diluted sulphuric acid. If diarrhoea should be present, neither of these medicines will be proper; and, instead of them, you must give opium, along with the chalk mixture. When hectic fever has abated, and the only feature remaining is debility, steel medicines, joined with some light bitter infusion, as, for example, the infusion of calumba, will often prove beneficial. Ten grains of ferrum tartarizatum, and two ounces of infusion of calumba, may then be given two or three times a day, according to circumstances; or you may try small doses of the sulphate of iron, in pills, or of the tinct. ferri muriatis. As one symptom of the disorder is a remarkable acceleration of the pulse, the number being seldom under 120, and sometimes as high as 140, or 160, it has always been the object of practitioners to discover a medicine that would reduce the number of the pulse; at one time, digitalis used to be administered with this intention, but it was found to do no good; for, though the pulse might be lowered by it, the patient was no better, as the medicine did harm by invariably increasing the secretion of urine, already copious, and frequently exciting head-ache and gastric disturbance: it is now, therefore, not employed.

We sometimes hear mention made of *irritative fever*: the late Mr. Abernethy used to speak, in his lectures, of the *sympathetic irritative fever*; from what he used to say upon the subject, I think he meant nothing more than a kind of re-action, which you will sometimes observe taking place in hectic patients. If a new inflammation, or a new irritation, supervenes when hectic fever is established, the pulse becomes quicker, and is attended with a degree of artificial strength, not observed in common hectic; it is merely a temporary exertion of a debilitated constitution, but its consequences are often serious. The nervous system is immensely disordered; there will be disturbance of the sensorial functions, or complete delirium; the pulse will beat with an artificial force, but with too much rapidity for common inflammatory fever; the countenance has a wild and frequently a cadaverous appearance; and subsultus tendinum will take place. Such is the condition in which hectic patients frequently die, and especially if there should have been a new irritation a little while previous to death. I believe opium to be one of the best medicines which we have in this violently disturbed state of a weakened constitution; but, if delirium prevails, you should have the head shaved, and the scalp bathed with cold lotions, or blistered. At the same time, soothe, as much as possible, the local disease, which, perhaps, could hardly be removed by an operation, with any prospect of

success, during an attack of *irritative fever*. Thus, when a bad compound fracture, that has been discharging profusely, and keeping up common hectic fever for some time, is attacked with fresh and extensive inflammation, or with erysipelas, the discharge ceases, and the constitutional disturbance changes into irritative fever. Here you ought unquestionably to direct your attention to the new attack of inflammation; for, by lessening it, you will take the most likely means of quieting the irritative fever connected with it.

Pursuing the plan, laid down for this course of lectures, of first considering the elementary parts of surgery,—of beginning with inflammation, and then proceeding to its occasional consequences, I now arrive at the subject of *mortification*.

The term *mortification* is applied to the death of a part of the body, frequently a considerable part; or, I may say, that it means the conversion of such part into a dark or black, fetid, cold, and insensible mass, with which the general nervous and vascular systems have no longer any organic connexion. This may be considered a definition of *mortification*. In the bones, the state corresponding to mortification of the soft parts, is termed *necrosis*. The entire and permanent cessation of every action, and function in the part is absolutely essential to what is understood by *mortification*; for sensibility and power of motion may be abolished, and yet the part affected may continue to live, as is familiarly illustrated in paralysis. The temperature of a paralytic limb, I believe, is generally diminished, and so probably is the momentum of the blood in it; still the fluids pursue their usual course; nutrition and absorption are carried on; and the parts retain, for an indefinite period, what may be considered as an inferior degree of vitality.

We know, gentlemen, that it is the property of living matter to resist putrefaction; but no sooner is life withdrawn from any of the animal textures, than they become subject to the laws of chemical affinities, by which they are decomposed, and new combinations formed. Hence various fluids and gases are evolved, and hence the putrefaction and the fetid smell which always follow mortification.

Heat, sensibility, and arterial pulsation may be abolished in a part for several days; but afterwards gradually return. We see this fact exemplified in the effects of cold, and in the present epidemic cholera; where, from the stoppage of the circulation and of the secretions, and the loss of temperature in parts, we might be apprehensive of mortification, and expect that it would take place frequently; yet, out of three hundred cases of cholera, attended by Professor Magendie in the Hôtel Dieu, there was only one instance of mortification. In that case, a portion of the fingers mortified, becoming affected with that form of mortification which I shall hereafter describe to you under the name of *gangrena senilis*, an ex-

ample of *dry gangrene*, as surgeons call it. Also in another hospital at Paris—that of St. Louis—there was but a single instance of mortification out of a great number of cholera patients. In the case alluded to, it attacked the extremity of the nose. Generally, in cholera patients, if they recover, however cold, insensible, and destitute of arterial pulsation some parts of the system may have been, such state is not followed by mortification, and the parts recover their functions and healthy action. The state of parts, now described, is as different from mortification as real death is from suspended animation. You may always avoid delivering an erroneous opinion in such circumstances, by observing, that, when the part is not truly mortified, there is no detachment of the cuticle, and no evolution of fetid gas from the parts.

Gentlemen, I must next explain, that the most common form of mortification, namely, that which is called *humid gangrene*, from the abundance of moisture noticed about the dead parts, has two stages. To the early stage, while some marks of vitality yet remain in the disordered textures, the term *gangrene* is particularly applied. Gangrene, then, is a mortification which is not actually formed, but forming. It is the intermediate stage, between the height of inflammation and the complete death of the part. When mortification is completely established, we have then the second stage, which receives from surgeons the technical name of *sphacelus*; or *sphacelation* is said to have taken place. Parts, in this state, are generally of a dark brown, or black colour, always devoid of circulation, sensibility, and natural heat, forming what are called, in the language of surgery, *sloughs*; another term, the meaning of which you ought to remember, because you may be required to explain its signification to inquests and courts of justice, when called upon to give evidence in questions of the highest importance. A *slough* is so called because it separates from the rest of the body, or was once fancied to do so, much in the same way as the skin of a snake is thrown off at a certain period of the year, the part detached being commonly called the *slough*.

Now, although there is the distinction, which I have mentioned, between *gangrene* and *sphacelus*, or complete *mortification*, yet you will find that the two terms are often used synonymously. It is a curious fact, that the black fibrous substance constituting a slough cannot be imitated by any kind of proceeding applied to the dead body. By chemical means, you may decompose a portion of dead skin, cellular membrane, or muscle, but you cannot convert it into any thing at all similar to a slough. Extraordinary as it may seem, it is therefore not less true, that the process, by which a slough is formed, appears essentially to require, in some of its stages, the co-operation of vitality.

In speaking to you of inflammation, I spe-



cified mortification as one of its occasional consequences, or terminations, as they are sometimes called. It is not, however, frequently the result of common or phlegmonous inflammation in a sound constitution, except when the exciting causes are unusually violent, or protracted in their operation. Thus, if the inflammation has been excited by bad gun-shot wounds, severe compound and comminuted fractures, extensive, lacerated, and contused wounds, mortification is frequently produced. So when the textures of the body have been acted on by powerful chemical means, they are frequently destroyed at once, and must be thrown off in the form of a slough. These injuries, as well as some mechanical ones, disorganize the parts at once, depriving them almost immediately of all vital action, on which account they must be thrown off from the living textures before a cure can be effected. In general, however, the parts are less injured, yet the mischief which they have sustained is such, that it is unavoidably followed by violent inflammation, which quickly terminates in gangrene and sphacelus. In some other instances, the inflammation proceeds to mortification on another principle, namely, because the action of the exciting cause is protracted beyond a certain time, as when urine is effused in the cellular membrane of the penis, scrotum, and perineum, and suffered to remain in that texture too long. The violent degree of inflammation, thus produced, infallibly leads to mortification. The urine, moreover, is an irritating fluid, so that, independently of its remaining long in the part, it would, by its very stimulating properties alone, be almost sure to produce sloughing.

It is also from the long-continued operation of the exciting cause, that mortification is induced in cases of strangulated hernia. The bowel, protruding through the inguinal canal and abdominal ring, is pinched in a part of this track, but it would not mortify if it were soon pushed back again; but, when it is suffered to remain strangulated too long, then it is sure to mortify. When mortification follows external injuries, such as bad compound fractures, or severe lacerated and contused wounds, it is invariably preceded by redness, swelling, and other marks of inflammation; the cuticle is raised in the shape of vesications containing a dark bloody serum; the texture of the cutis is softened, and assumes first a purplish, greenish or livid hue, and afterwards a dark, or black, colour. Putrefactive changes now commence: the cellular membrane is extensively destroyed, and air is generated in the disorganized parts, so as to give rise to a kind of *emphysema*. On touching the parts, therefore, a *crepitation* is felt, and you are sensible of the presence of air in them. At the same time, there is a very fetid exhalation from the destroyed textures, and accompanied by more or less humidity: hence the term *humid gangrene*, applied to this form of mortification. Here you perceive the word *gangrene* is used

synonymously with *mortification*; you never hear of *humid mortification*, but always of *humid gangrene*; and it is called humid to distinguish it from *dry gangrene*, which is particularly characterized by being destitute of moisture, as I shall describe in a future lecture. *Humid gangrene* is sometimes called *acute*, as contrasted with another kind, which is slower in its progress, generally arising from internal causes, and is named *chronic*. Chronic mortification has several varieties, which will be hereafter described. In the *humid or acute mortification*, the cellular membrane is mostly destroyed to a much greater extent than the skin and muscles, which, having greater vascularity, and being more highly organized, are, on these accounts, better able to resist mortification, than parts less richly endowed with nerves and blood-vessels, like the cellular tissue. The truth of this is further illustrated by what takes place in fasciæ and tendons, which frequently mortify to a greater extent than the skin. It may be asked, what use is there in knowing these facts? Gentlemen, you will find, there is considerable use in knowing them; for example, in amputations, if you were always to begin the incisions near the line of the sound skin, you would frequently leave a considerable quantity of mortified cellular tissue on the stump; therefore it is always proper to consider, before you fix on the place for the first cut, how far it is likely that the sloughing of the cellular membrane may extend up the limb.

When *humid mortification* follows severe gun-shot injuries, bad compound fractures, extensive, lacerated, and contused wounds, or other kinds of mechanical violence, it is sometimes named *traumatic gangrene*. This is a term in common use in the writings of military surgeons, and especially those of Baron Larrey. Traumatic gangrene requires to be viewed in a particular light, as regards its treatment, as I shall take an early opportunity to explain. Besides these principal divisions, there is another variety of mortification, by some supposed to be *contagious*; it consists in a rapid and singular kind of destruction of the parts attacked, which are not converted into common sloughs, but into a whitish or ash-coloured viscid substance, studded with specks of blood. It is a disorder, that may be said to be neither like ordinary mortification, nor common ulceration, but something between the two; it has received the name of *hospital gangrene*.

The following are the principal causes, by which mortification is produced, and its most remarkable differences and peculiarities are determined:—

1. Inflammation, attended with violence in its degree and nature. I have repeatedly told you, that violent degrees of inflammation will produce mortification: this doctrine is universally acknowledged.
2. Inflammation attended by weakness, either in the parts themselves or the constitution. The first case is exemplified in certain modi-

fications of texture; the second is illustrated by the occurrence of gangrene after fever, a long course of mercury, or indeed after a great reduction of the powers of the system by any cause whatsoever, from dropsy or scurvy, from intemperance, old age, &c.

3. The character of the mortification is determined, in a great measure, by the inflammation being *specific*, or of a *malignant* nature, like that seen in particular forms of erysipelas, carbuncles, the small-pox pustule, the malignant pustule, and pestilential bubo. Here the inflammation is of a specific kind, and mortification is, as it were, a part of its character.

4. Stoppage, or serious interruption of the circulation and nervous energy. A mere diminution of the latter will not be sufficient of itself to produce mortification, because we find that paralytic limbs live for an indefinite period, but that it facilitates the occurrence of gangrene, and renders a part more liable to it cannot be doubted; and hence the greater probability of mortification when the principal artery of a limb is wounded, together with a large nervous trunk, than when wounded by itself. If the brachial artery in the arm be alone cut, the patient will probably do well, but this can hardly be expected if the median nerve be divided along with it. Ossification of arteries gives a predisposition to mortification, by disqualifying them for the perfect execution of their functions; and pressure not only interferes with the circulation, but with the distribution of the nervous influence.

5. Irritation in a thousand forms, friction, and too much stimulation, protracted beyond a certain length of time, are common exciting causes of mortification.

6. Applications acting chemically or otherwise, immediately destroying the life of a part, such as intense heat, lightning, concentrated acids, caustics, &c.

7. Intense cold; but this is more properly a predisposing cause than an exciting one, because generally the part requires to be suddenly warmed again. As long as it continues cold, it will not mortify; but directly it is brought near the fire, or is thawed, then we have violent inflammation rapidly followed by mortification. Some curious facts on these points will be adverted to in a future lecture. Cold, then, is the predisposing cause, and the exciting cause is sudden exposure of parts, whose temperature has been much reduced, to a higher temperature.

8. Organic disease of the heart or aorta, or of their valves. When old persons have chronic mortification of the lower extremities, it is frequently found to be dependent upon some organic disease of the heart, aorta, or of their valves, which, at all events, is concerned as a predisposing cause.

9. I may mention also certain deleterious articles of food, as occasionally producing mortification, which has been known to occur as an epidemic in provinces and districts where rye is much employed as food, and happens to

be in the state termed *ergot*, or *cock-spur rye*. Such an epidemic mortification, I believe, has never happened in this country; but it has repeatedly occurred in France and Switzerland. Food of this description produces the form of mortification called *dry gangrene*, in which the limbs affected look like those of the dead subject, except that they are more shrivelled; and somewhat changed in colour.

10. With regard to specific contagion, as a cause of mortification, I must observe, that there is a diversity of opinion on this subject. Some surgeons admit that hospital gangrene is contagious; but others maintain the contrary doctrine. This disease sometimes occurs to a great extent in certain hospitals, which are crowded with patients afflicted with wounds and ulcers; but possibly its propagation may not be entirely owing to contagion, but partly, at least, to the individuals attacked all living together, all breathing the same atmosphere, and being exposed to the pernicious influence of the same causes, which led, in the first instance, to the production of the disease.

Gentlemen, having now explained to you the meaning of the terms, *mortification*, *gangrene*, *sphacelus*, and *slough*; and called your attention to the division of mortification into *acute* and *chronic*, *humid* and *dry*; having also noticed the distinctions of *traumatic* and *contagious* gangrene, as well as the causes and local symptoms of mortification, I shall now proceed to describe its *effects on the constitution*.

When any considerable portion of the body is threatened with mortification, the rest of the system is immediately thrown into a state of universal derangement, one prominent feature of which is a remarkable and sudden depression of the powers of the constitution. If the mortification be preceded by inflammation, arising from a severe mechanical injury, the inflammatory fever following the accident is indeed violent for a short time, but its character soon undergoes a sudden alteration, and, instead of continuing to exhibit indications of disturbance, attended with the strong actions of ordinary inflammatory fever, it becomes at once marked by unequivocal appearances of great prostration of strength. The fever frequently resembles that to which the term *irritative* is applied, and which I have already described. You must not expect, however, the symptoms to be alike in all cases. Their particular character and degree of severity will depend on the species and extent of the mortification, and on the nature and functions of the part affected. When the local mischief is restricted to the cellular texture, and is of limited extent, the accompanying fever may not be very different from the common sympathetic inflammatory fever; but, when the mortification is more extensive, or situated in parts of greater importance, the constitutional symptoms are severe, and often such as soon prove fatal: the countenance suddenly assumes a wild and cadaverous appearance; the stomach

becomes disordered; there is incessant vomiting; and the diaphragm is affected with a violent spasmodic action, causing a most annoying and loud kind of *hicough*, exceedingly difficult to suppress. At the same time, the intestinal canal usually becomes prodigiously distended with gas, and cold, clammy perspirations break out on the surface of the body. The pulse is small, rapid, and irregular; the functions of the brain are confused and disordered; the ideas become incoherent; and coma or delirium ensues. In this condition you will observe the utmost prostration of all the powers of life; and, in fact, it is a state, which generally soon has a fatal termination.

Gentlemen, I will postpone the rest of the subject of mortification till to-morrow evening.

## CLINICAL LECTURES

AT THE

MEATH HOSPITAL, OR COUNTY OF  
DUBLIN INFIRMARY,

DELIVERED BY

DR. GRAVES, M.R.I.A.,

*King's Professor of the Institutes of Medicine in the School of Physic, Dublin.*

(Corrected by himself.)

SESSION 1832-33.

LECTURE II.—PERIOSTITIS.

GENTLEMEN,

BEFORE I enter on the subject of our intended lecture, I have to remark, that there are some cases in the hospital possessing considerable interest. Those to which I would particularly direct your attention are three cases of pneumonia, in which the stethoscopic phenomena are palpably and distinctly marked. I am anxious that junior students should examine these patients, and with them commence the investigation of chest diseases, because the indications in the cases alluded to are so extremely plain and obvious. Much of the discouragement which students experience in endeavouring to become stethoscopists, arises from the obscure and doubtful nature of the cases which are too often presented to them in the very commencement of this study.

I would recommend beginners to examine, at first, the peculiarities of healthy respiration in boys, and then in adults, and never to apply the stethoscope to a diseased chest until they have been first informed, by some competent person, of the presence of well-marked phenomena. In one of the cases above stated, the *râle crepitant* is exceedingly distinct; and having once heard it, you will always be able to recognize it with facility. There is also a man affected with phthisis, in whom the *gar-gouillement* is so audible, that the merest

beginner, on applying the stethoscope under the clavicle, would say he heard the gurgling of air entering a cavity containing fluid. I point your attention particularly to this case, because its self-evident nature renders it highly valuable. We have also a well-marked case of hæmoptysis, or spitting of blood, a term which I prefer to that of pulmonary apoplexy. This man had laboured under this affection for some time; and two days since, spat, during the course of the night, about three pints of blood. There are many cases of cerebral disease, vertigo, epilepsy, and paralysis arising from apoplexy, or following painter's colic; so that those willing to instruct themselves will find the field for observation sufficiently ample.

I shall now proceed to make some remarks on the general pathology and treatment of periostitis. I regret to state that the articles on this subject in Cooper's Surgical Dictionary and other works are deficient in a practical point of view. It is a disease which has been known as long as syphilis; but its true pathological nature was not pointed out until Mr. Crampton gave his admirable description of it in the first volume of the Dublin Hospital Reports. We have frequently heard tenderness of the skin, with increase of size, termed swelling, or diseased growth of the bone; but you will find that, in most of these cases, the swelling and other symptoms are owing to the peculiar state of the periosteum alone. Periostitis is a disease of considerable importance, because its symptoms are produced by scrofula and other cachectic states of the constitution, as well as by the abuse of mercury and other remedies. You will have occasion to observe instances of this disease superinduced by cold, or by giving mercury under unfavourable circumstances, and in the latter case frequently confounded with syphilis. This is an important fact, and you should hold it in memory. Another great mistake is, confounding it with neuralgia, or where it attacks the head, with hemicrania, because one side of the head only may be affected, and the pain may be increased at a stated hour, generally towards night. I have seen the carbonate of iron given in large doses by a medical gentleman of considerable eminence, to cure a pain in the side of the head, which arose from inflammation of the periosteum. Another instance of a similar kind has lately come under my observation in private practice, and I once committed the same mistake myself.

Before I enter into the further consideration of this subject, I must state to you that an opinion was formerly entertained, that membrane or periosteum was the repaireur of bone, where its regeneration was necessary. But in this process, the vessels of the bone itself are as much concerned, and membrane contributes nothing to the formation of bone, *except so far as its vessels are engaged*. The formation of callus in fractures, the development of healthy bone in necrosis, the organization of node and

exostosis, depend not on any membrane, but on the vascular part of the periosteum, and on the vessels of the bone itself. It is true, however, that where other vascular channels are cut off, the periosteum will, to a certain degree, supply their place, thus becoming the sole means of establishing vascular communication. It is to Scarpa we owe our information on the true nature of the reparation of bone. You will find, on this subject, a great number of experiments detailed in Cooper's Surgical Dictionary.

With respect to the periosteum, it is like other parts of the system, liable to inflammation; but you are not to suppose that its liability is greater than that of other tissues. This would contradict the arrangements of nature; for it is with this membrane she has clothed many parts of the body which lie close to the surface, as the shins, head, ribs, elbow, and other joints, which, beside the periosteum, have, for the most part, only a thin covering of integuments. You all know how frequently the periosteum is exposed to injury in the foot-ball matches at schools, and at our Irish fairs, and with how much impunity. I may observe here, that the term I shall employ in speaking of the affections of this membrane, periostitis, is a name introduced by Mr. Crampton. Now, according to the view which I have taken of the formation of bone, it will appear that the subjacent bone is often as much diseased as the periosteum, and, indeed, sometimes the disease commences in the bone, and afterwards extends to the periosteum. With this exception, the definition given by Mr. Crampton is good. I beg leave to mention, *en passant*, that Mr. Howship's papers on the Formation and Diseases of Bone are deserving of your perusal. He has examined and given delineations of the various structures of diseased bone; but I do not consider his account of the structure of bone to be sufficiently established to enable us to deduce important pathological facts.

There are numerous interesting preparations, illustrative of this subject, in the Museum of the Dublin College of Surgeons; and there is no one who can do more towards improving our notions on the structure of bone than its scientific curator, Dr. Houston. He is at present engaged in forming a classified catalogue, in which a minute account will be given of the pathological circumstances of each case, and the attendant symptoms during life. I need not say what a valuable acquisition this will be to our stock of knowledge. In the course of our inquiry I shall communicate to you several useful hints on periostitis, which I have received from Dr. Houston.

You will observe, gentlemen, that, in inflammation of the periosteum, the peculiar texture of this membrane modifies the symptoms of the disease. The periosteum is fibrous, and, though not thick, is remarkably strong and unyielding, lacerated with difficulty, and does not accommodate itself, except to that which

it was intended by nature to cover; hence, if a part increases in size, the periosteum over it is stretched and tightened, and this is one of the principal causes of the severe pain usually felt. You are aware of the swelling which attends the common forms of inflammation of cellular substance, where the parts can extend themselves on every side, must be differently circumstanced from that which arises from abscess, under fascia, or lying close to a bone, and that there must be a corresponding difference in the pain. You will find, in various surgical works, that, in periostitis, the pain is sometimes great where very slight changes have taken place, and that little pain is felt in some cases where there is considerable alteration of structure.

It is a remarkable fact, that, in many instances of periostitis, exactly corresponding parts of the bones of the different extremities, on different sides of the mesial line, will be found simultaneously or successively attacked. Thus, if a certain spot on the bones of one fore-arm, or one acromion, or any other part of the scapula, be attacked by inflammation, similar appearances will manifest themselves in the other either at the same time, or in a few days after. If it seizes on one clavicle, you soon observe it in the other. You will have occasion to treat this disease in perhaps most of the human bones, but particularly in the head, tibia, femur, sternum, and scapula. In the sternum it sometimes leads to a carious destruction, forming a large hole in the bone, as happened in a young man, formerly in this hospital; in his case, each stroke of the heart caused matter, mixed with air, to bubble out, presenting a very curious and frightful appearance. Periostitis, occurring in the neighbourhood of joints, often spreads to the joint itself, giving rise to periostitic arthritis. Thus, from the tibia, it frequently spreads to the knee, or ankle, and from the humerus, or scapula, to the shoulder-joint. The sternal articulation of the clavicle is a favourite seat of periostitis. In the ribs, it much more frequently attacks them in their anterior portion, not far from the sternum, or from their cartilages, and occasionally gives rise to costal caries, for which Cittadini has recommended a particular operation. I would recommend you to hold in memory, that when the disease affects the thigh-bone, it is almost invariably about the junction of the middle and lower thirds, and generally on its anterior or inner surface; as this is a practical observation, which I have not seen noticed in books. There is also, in this form of periostitis, one peculiarity that, besides the very great severity of the pain which attends it, we find that it yields with the greatest possible difficulty to medicine, and that the means of curing it are a desideratum we have still to discover. The next species, most remarkable for its painful symptoms, and one which deserves to be explained more fully, is periostitis of the head. There are three subdivisions of this species. The first kind is very easily re-

recognized, for you will find the affected spots sore, slightly swelled, and hardened, with marked tenderness on pressure, and the head-ache, which accompanies them, radiating from these spots as from so many centres. In the second form you will find the pain obscure and not confined to a certain spot, but the swelling and thickening of the scalp are evident, and give certain indications of the nature of the disease. You may also observe cases where the inflammation is diffused over one side of the cranium, and not fixed to a small distinct spot, and these are attended with severe pain. With respect to these varieties, you will not find much difficulty in ascertaining their nature; but there is another kind, in which the diagnosis is much more obscure. A patient, for instance, complains of severe head-ache, at first attended with intermissions, generally increased towards night, and accompanied with a sense of weight in the head; his eyes look watery and heavy, and lose their usual animation, and his spirits are depressed. Ask him in what part of his head he feels the pain, and he cannot tell you exactly. Sometimes he refers it to the forehead, sometimes to the side of his head. There is no point of the scalp in which you can detect any soreness or swelling. Matters go on in this way for some time, he begins to lose his rest, the intermissions become shorter and not so perfect, and the pain increases. During the day it is tolerable, but, towards evening, it is excruciating, and does not allow him to enjoy one hour's rest in the twenty-four. The largest doses of opium, and other strong narcotics, are useless. Rest in bed, stupes, cold lotions, narcotic liniments, even bleeding and leeches, give but very small relief. After exerting all your ingenuity, you still have the mortification of finding that there is something wrong going on, which eludes your skill. On your first visit, from the appearance of the patient and the detail of his symptoms, you are led to suspect that the brain is the part diseased. You employ your antiphlogistic remedies, but find no improvement, and begin to doubt the correctness of the diagnosis. Moreover, in cases of this kind (where you will find a tenderness in the integuments on close examination, and pain limited to one side of the head), there is, occasionally, a partial ptosis of one eyelid, which creates alarm and leads you to imagine that it is the brain itself which is affected. Ptosis, or falling down of the upper eyelid, is a very frequent symptom of cerebral disease; and, consequently, in determinations to the head, in fever, and other complaints, it is a bad sign when one eye, in consequence of some degree of ptosis, appears smaller than the other. There is certainly some degree of paralysis in this case, but it is only secondary, and not depending on the brain, but on the inflammation, affecting the nerves themselves. I mention this because not generally known or described, and because it is liable to excite alarm. Now, why is this disease not easily

recognized, or why is the bone so often devoid of tenderness to the touch? It is because the internal surface of the bone is the part first engaged, and the disease cannot become evident until after some time. After your usual treatment has been continued for a week or ten days with little improvement, a certain spot on the head will be found, tender on pressure, and it is only then that the true nature of the cause will appear. For this disease there is no cure but mercury. However useful depletion may be to prepare the system, nothing but mercury, and that in large doses, will relieve the disease. Give a scruple, or half a drachm of calomel in the course of the day, and bring the system thoroughly under its influence. You will do well to combine different proportions of this remedy, as there are some constitutions which are more quickly affected by one preparation than by another, and then combination is always valuable. It is very remarkable, that though you have made the mouth sore, relief is not immediately obtained; you must go on and affect the system, very decidedly, and when you have accomplished this, the pain and other symptoms will disappear. Of this we have an instance in the chronic ward. A periostitic patient had his mouth sensibly affected for several days, but with very little relief of pain. What did we do? We doubled the dose of calomel, and in a few days the pains had altogether disappeared. You may have perceived analogous instances in cases of iritis, where the disease begins to diminish on the mouth being made sore, and even may appear to have entirely subsided. Encouraged by this, the practitioner decreases the dose of mercury; the mouth continues sore, but in a few days, although the small doses of calomel are continued, and although the mouth is still affected, the characteristic symptoms of iritis again recur, and go on increasing, if you continue to trust to the diminished doses of calomel. Under such circumstances, a beginner might be discouraged, and lose his confidence in mercury, because the iritis had returned while the mouth was still sore, and before the remedy was discontinued. What is to be done? Instantly resume the large doses of calomel, with a more decided mercurial action, and the iritis disappears. In the mercurial treatment of periostitis, arthritis, peritonitis, and pleurisy, a similar method of managing this remedy is occasionally required, and it is of vital importance that you should know this.

With respect to that species of periostitis which affects the femur, you must recollect, that this bone lies so deep, that it is sometimes not very easy to detect the periostitic swelling. Generally it is the part of the bone before mentioned which is attacked, and in the cases I have seen, the inflammation was on the inner side of the bone. From its situation, this species is very apt to be mistaken for various diseases, particularly neuralgia, sciatica,

&c. &c. After some, time a certain degree of tumefaction may be distinctly felt, but not until the patient has suffered excruciating agony and distressing want of sleep; indeed in one case the poor sufferer scarcely slept at all for twenty nights in succession. One of these cases was relieved by corrosive sublimate, but two others were not in the least improved by mercury pushed to the utmost. Narcotics totally failed, but a seton over the affected part seemed to do some good. But, to return to periostitis affecting the cranium; it occasionally assumes the chronic form, attacking both surfaces of the bone, in a slow insidious manner. The following instructive example of this affection fell lately under my observation:—

A young man, of good constitution, previously healthy, became subject to epilepsy, very frequent and violent. Sometime previously he had complained of head-ache, chiefly referred to the left side of his forehead. The convulsions on the right side were stronger than on the left. He continued in this state for many months, and became incapable of pursuing his usual occupation. The convulsions became more frequent, recurring at different times in the day; and some of his medical friends thought they observed a prominence in the frontal part of the skull, and were anxious to have him trephined in that spot. On looking at him in front, you could not at once perceive any unnatural elevation in the forehead; but, by examining it from above downwards, according to the *norma verticalis* of Blumenbach, there was a perceptible swelling, as if the whole bone had been pushed forwards in that situation. After seven months' illness, he was seen by Dr. Colles, Mr. Cramp-ton, and myself. We objected to his friends' proposal to trephine, because we could not be certain that there was any projecting growth of bone pressing on the brain in this place, and because it had a certain degree of tenderness on pressure. We were afraid also, that there was an intimate union between the internal periosteum and the dura mater, as well as between the latter and the surface of the brain; consequently there was danger that the operation might induce inflammation in all these parts. Considering it to be a case of internal periostitis, in which the inner table of the bone and corresponding part of the dura mater were affected, we agreed to try the effect of mercury. We employed frictions for this purpose, as the internal exhibition of mercury produced sickness and vomiting; and at the end of eight or ten days, when the mouth became affected, we had another consultation. We were told there was no improvement; the fits still continued; his friends exclaimed that mercury was useless, and called for the application of the trephine: we were almost in despair. On closer inquiry, however, we found that though the fits had displayed the same violence, there was some slight diminution in their frequency, and on this slender hope we urged the continuance of the same remedy.

As soon as his system was completely affected, the disease began to decline perceptibly. It is now three weeks since he became salivated, and he is free from pain, and the convulsions have ceased.

When the vertebræ become the seat of periostitis from syphilis, scrofula, or abuse of mercury, it will be generally found in the bodies of the vertebræ. When brought on by syphilis alone, I believe, it seldom attacks the bodies, such cases arising chiefly from the abuse of mercury or scrofula. In persons of broken constitution from combined venereal and improper mercurialization, it is not an uncommon occurrence to find the neck presenting the symptoms of subacute crick, or collum obstipatum, which, if treated in the common mode, the disease becomes confirmed; and of this I have seen an instance in a gentleman, whose neck became permanently stiff for want of skill in his medical attendants. It will be obvious that inflammation of this kind, affecting the vertebræ, may be readily communicated to their ligaments and the adjoining tendons, and in this way produce the deformity. I have treated some such cases, and would turn your attention to it, because you will not find it mentioned in books. You will be able to know it by careful examination, by pressure, and find that its cause was disease of the periosteum of one, two, or three of the vertebræ; and you will employ, in treating it, leeches, repeated blistering, and compound decoction of sarsaparilla. If this does not do, mercury, and, except the disease has continued too long, you will cure it. Other vertebræ, as those of the back and loins, may become the seat of periostitis, and it may be mistaken in those cases for Pott's disease, or for Teale's spinal neuralgia, from which it is sometimes difficult to distinguish it. Periostitis sometimes attacks the sacrum and os coccygis, and is then peculiarly painful, as is now exemplified in the male ward. In females, I have been twice consulted within the last year for a pain in these same parts, which was at times excruciating, and always considerable; it was increased to an intolerable degree by sitting down, and hence they were obliged to avoid society. It appeared to be a variety of hysterical neuralgia, and yielded to nervous medicines combined with tonics, together with the local application of stupes, narcotic liniments, &c., &c. I know not whether authors have mentioned this peculiar neuralgia.

When periostitis attacks the sternum, it is very liable to be mistaken for disease of the chest. I remember a young gentleman, some time ago, who had a severe pain in his chest, which gave his father such alarm, lest it might be consumption, that he brought him with him to London for the benefit of change of air and to have medical advice. On his way thither he caught a cold, and in this condition waited on a medical gentleman, who prescribed medicines for him adapted to the cure of pulmonary disease. On his return to

Dublin (his pain still continuing), I was called in to treat him for a complaint in the chest. On placing the stethoscope over the spot where he complained of pain, he winced, and, after a minute examination, I discovered that the disease was entirely confined to the periosteum. It is possible, however, that in such cases, the disease may ultimately reach the chest, for the sternum is a very porous and spongy bone, and a complete perforation of its substance may be the result of periostitis long continued. Another way in which it may be confounded with rheumatism of the intercostal muscles, or with pleurisy, is where periostitis attacks the ribs. This is a very common source of pain, tenderness, and stitch of the side.

There is a form of periostitis which extends from the bones of the foot to the plantar aponeuroses; it is found chiefly in labouring men; and the predisposition to it seems to arise from the use of the spade in digging. I do not know that this form has been mentioned by any author I am acquainted with. The most severely painful instance of all the varieties of periostitis is, perhaps, the paronychia periosteae, or bone whitlow, to which, as it belongs to surgery, and its treatment is well known, I shall merely allude. I shall conclude my observations on the special pathology of this disease on Tuesday, and proceed then to the consideration of hæmoptysis.

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## REMINISCENCES

OF AN

### ARMY MEDICAL OFFICER.

PART I. CHAPTER VI.

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It has been asked by a friend, "when does the writer mean to *take the field*?" "You declare yourself," he observes, "to be an *officer*, but you have hitherto been giving us the history of a *student*."

What, let me ask, can be more interesting than the faithful recapitulation of a student's progress? Were we not all students once? And can there be any thing more gratifying, or more becoming, than the payment of a tribute of respect to the virtues, the talents, or the memory of those who moulded us while we were plastic, and gave us the benefit of their example and experience?

I hope the readers (more especially the juniors among them) will lay impatience on the shelf, and grant me as much time, upon a very small com-

parative scale, as was, in reality, required for getting into his Majesty's service. I purpose to tell them all about it, in a very faithful manner; but I cannot tell every thing at once.

To resume. Dr. Gregory commenced his course of lectures by a concise but instructive introduction, devoted to the history of the rise and progress of medicine, which was even redundant in curious research. The details were strictly according to the arrangement of Cullen, whose "First Lines" were the text book for the class. This respect for his own illustrious instructor was great, and becomingly manifested; although he did not hesitate to express dissent from his doctrines upon proper occasions, or to point out what he considered to be erroneous; but this was done with modesty, without any affectation of rivalry, and as an act of duty imposed by the improved state of science.

I have heard it remarked, that this great man contributed nothing to the stock of medical knowledge, with which the profession was previously acquainted; but this is not candid. It was barely possible for a physician, in such extensive practice, to devote the bulk of his time and industry to matters of an experimental or speculative nature. And yet, when he was physician to the Royal Infirmary (before my time), it is evident, from the frequency with which he recurred, in his lectures, to the clinical and other proceedings carried on there, that, if he did not make many discoveries, he added greatly to experience, and brought his acquisitions to great practical benefit—the true end and object of all medical undertakings. Of his published works there is no occasion to speak: with regard to them, the unanimous opinion of the learned has done him justice.

Dr. Hope mounted guard, I have observed, at 10 o'clock. To describe the exterior aspect of this learned chemist is not my intention. Suffice it to say, that he was the very pink of professional elegance, both in person and in dress; possessing, moreover,

considerable attractiveness of manner, and felicity of expression. He powdered very white, and was bald over the sinciput. He wore always black, of the finest texture, and brushed in the most careful manner; his coat was always open, while the waistcoat was buttoned from the bottom to the chin: not a few of the more *recherché* among the students imitated him in the article of *garb*.

The number which gave their attendance upon his admirable lectures was said, in common *parlance*, to amount to 450, a considerable proportion of whom came *en amateur*. There were many elderly men, who had been frequenters of the class, and perpetual pupils of course, time out of mind. There were not a few also who had no views of pursuing medical study, but who had a thirst for chemical knowledge. Among whom I may quote, as a contemporary of my own, Sir George Clark of Pennycuik, Bart., M.P., afterwards one of the Lords of the Admiralty. Go where one will there is a *mos loci*, which differs in different places. The professor of chemistry lectured standing in front of a large chair, behind which was the fire-place; and the space between these generally crowded with standers up, gentlemen who commonly come in last; or who conceived sitting among the *πολλοί* to be worthy only of radicals. In the anatomical theatre, the aristocracy generally sat in what might be termed the upper house, viz., the back and uppermost row of the pit. Sir G. C. stood always behind Dr. Hope, being there beyond reach of contamination. In Gregory's it was somewhere towards the back also\*; but aristo-

\* The higher orders here generally sitting covered, to keep the professor in countenance, no doubt. In Dr. Duncan's class I used to take my own place pretty far back, and observed that some of the better sort of society were subscribers to a circulating library—*Anne Radcliffe, Charlotte Smith, &c.*, were formidable rivals to the lecturer. There might have been some excuse had Sir Walter Scott been his competitor; but all this occurred ere *Waverley* was written.

cracy did not cut it very high in his presence, because every one was anxious to hear, and therefore disposed to be attentive. There were a few examples of *delicacy* and *decorum*, who acted as fire-screens to Dr. Duncan senior; but I am not come to him yet, in due course.

I do not think Dr. Hope ever failed in an experiment. He was, with the exception of the late Murray and Faraday, the neatest hand I ever saw deal with delicate instruments. His lectures were brilliant, as good chemical lectures ought to be; but the doctor sometimes exhibited bad taste, not in the selection of his experiments (for than these nothing on earth could approach nearer perfection), but in his mode of admonishing, or administering reproof. However loud might be the explosions which he and his valet (who acted as assistant-experimenter) occasioned, the doctor would not bear to be *roughed*, or *ruffed*—(I hardly know which, neither being a military word, though I have myself been once or twice *rowed*). He used to explode after the manner of a mixture of *acidum nitrosum* and *oleum terebinthinae* (though not quite so smoky), if the auditory testified any thing in the shape of applause at his sayings or doings. Nevertheless, Dr. Hope is a gentleman and a learned philosopher, and I shall ever respect, as while I was his pupil I admired, him—though I did not dress exactly in imitation of him.

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#### ST. GEORGE'S HOSPITAL MEDICAL AND SURGICAL SOCIETY.

A SOCIETY has been formed lately at St. George's Hospital, entitled "*The St. George's Medical and Surgical Society*." The officers of the Society consist of two Presidents, Dr. Chambers and Mr. Keate; two Vice-presidents, Messrs. Cooper and Johnson; Treasurer, Mr. Jackson; a Committee, two honorary secretaries, Dr. Aldis and Mr. Berkeley.



The first general meeting of the Society took place on Thursday evening last, in the theatre of the hospital. Drs. Hewett, Seymour, and Wilson, as well as Messrs. Keate, Hawkins, and Babington, were present. Dr. Chambers, upon taking the chair, thanked the Society for the honour they had conferred upon him, in electing him their President; and in an appropriate and judicious speech, dwelt upon the advantages which might be derived from the formation of the Society. Mr. Clark read a paper on acute inflammation of the periosteum, upon which a very animated discussion arose between Messrs. Babington, Hawkins, Keate, J. Johnson, Fernandez, &c. Dr. Wilson, during the evening, communicated to the Society the substance of a letter, which he had received from Constantinople. It referred to the plague, and the treatment of fever, by bleeding without mercury. The medical officers of the hospital have warmly patronized the Society, which, no doubt, will succeed in every possible manner.

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MR. CARMICHAEL'S OPERATION FOR TRACHEOTOMY.

*To the Editors of the London Medical and Surgical Journal.*

GENTLEMEN,

IN noticing a paper on Tracheotomy, furnished to the Dublin Journal by Mr. Carmichael, in your Journal of the 8th inst., I observe you refer to Dr. Murray's mode of operation, and express your conviction that Messrs. Carmichael and Adams could not be aware of it when they wrote their papers. Now, allow me (as I observe you intend making some further remarks in your next number) to put you in possession of the following facts.

Dr. Murray's Work, a short time after it was published by Longman and Co., was unfairly criticised—I cannot say reviewed—in the *Lancet*.

It was also reviewed in a publication called the "*Annals of Pharmacy*," edited by Mr. Donovan; and, if my memory does not greatly deceive me, Dr. Murray presented a copy of it to Mr. Carmichael himself. It would therefore seem strange that those gentlemen should be unacquainted with it.

Of that work and its author I should know a good deal, as I lived with him during all the time he was writing and publishing it, and transcribed a great part of the manuscript in fair copy for the press.

As I have left Dr. Murray above two years, most of which time I have been in London, I can have no motive in furnishing you with this, or any other information on the subject, but to enable you to render justice to a man of decidedly original abilities and superior talent, and who, I doubt not, ere long, will teach the practitioners of Dublin to be content with claiming credit for *their own inventions*.

I am, Gentlemen,

Your most obedient servant,

A LATE APPRENTICE OF  
DR. MURRAY'S.

22, Shaftesbury Terrace,  
Pimlico, Dec. 12, 1832.

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CEREBRAL IRRITATION.

BY JOHN SWIFT, ESQ.,

*Surgeon, Dublin.*

CASE II.

MARY BYRNE, *ætat. suæ* 10 years, applied to me, as a dispensary patient, on the 18th of September in the present year. Her countenance had a combined expression of fatuity and intense suffering; she complained of very severe pain in the back of the head; her tongue was clean, except towards the root, where it appeared dusky and furred; her pulse nearly natural; skin hot; bowels habitually confined. The head-ache and costiveness had been of two or three years' duration, with few intermis-

sions, and had latterly been very much increased. The abdomen was very tender about the umbilicus, and she had frequently experienced very painful sensations (as far as I could learn) in the transverse colon. The head-ache was described as commencing at the cerebellum, and shooting in the direction of the anterior lobes of the brain. She frequently, after turning round for several times, dropped down on the floor in a stupid and senseless state. There was some incoherence in speech, and constant somniloquence. About four or five o'clock in the afternoon, she usually had one of those fits, and continued in a state of stupid watchfulness until next morning. Her appetite had formerly been very ravenous, but was now weak and variable. Her mother states that she has not slept for the last twelve nights. Hab. hydrarg. submur. gr. v. Pulv. antim. gr. iv. vespere et cras mane. Magnesiae ustæ, pulv. rhei, āā. ℞j. Aquæ cinnam. ℥ij. ft. haust. duabus vicibus sum.

19. No relief; bowels still confined; head-ache very severe; slept none. R. Rhei, jalapæ, āā ℥ss. potassæ bitart. ℥ss. zingib. gr. xij. Theriacæ, q. s. ut fiat electuarium. Sumt. cochl. parvum ter quaterve indies. Emplast. vesicat. nucleæ, to be kept open when raised by kail leaves. (Those leaves are a popular mode of keeping up a discharge from a blistered surface; and where a copious discharge of serum is required, answer the purpose extremely well.)

24. Blister followed by an extensive pustular eruption, somewhat resembling varicella, over the back of the head, neck, shoulders, and arms. Head-ache lessened. Medicine acted but very slightly on the bowels. To have two powders, each containing five grains of hydrarg. and submur. and twelve of jalap, one in the evening, the other next morning.

26. Still sleepless, and complaining of severe pain in the head, shooting from the occiput towards the right supra-orbital space. Took the two powders without any effect, and after-

wards got a dose of salts, which produced one black fluid motion. Hab. statim hydrarg. submuriat. gr. decem et post horas quatuor sulphatis magnesiae, ℥j.

27. Pain over the orbit still severe. Had a very prolonged fit on the preceding afternoon, attended with the usual symptoms of stupefaction. Three fætid motions of a very black colour and watery consistence towards night, when she experienced some relief. Sumt. statim hydrarg. c. creta, ℞j et post horas iv. Infusi semmæ, ℥iiss. sulphatis magnesiae, ℥ss.

28. Rather better. Yesterday, about four o'clock, sat up in bed, tossing her arms, and apparently insensible. Repr. hydrg. c. creta ut heri et sum. Pulv. rhei, ℥ss. magnesiae ustæ scrupulum in cyatho lactis. Stools still thin, of a pale green.

29. Passed five or six copious motions, the last of a natural colour. Head-ache nearly gone; countenance lively and much improved; slept last night for eight hours. Hab. pulv. rhei, ℞j. magnesiae ustæ, gr. x. Tinct. cinnamomi, ℥ss. Aquæ font. ℥iiss. ft. haust.

30. Quite well. Sleep and appetite natural. Complains only of the eruption on the neck and shoulders. R. Pulv. jalapæ, ℥j. Potassæ bitart. ℥ss. Sulphuris loti, ℞j. zingib. gr. xv. Theriacæ, q. s. ut fiat elect. Sum. cochl. unum parvum bis indies.

She continues well, and has had no return of the cerebral symptoms.

The first of these cases presents many points of interesting inquiry. The young gentleman, who was the subject of it, belonged to a family in which disease seems to have been intimately connected with an over active and irritable state of the arterial system. His father and paternal grandfather died of apoplexy; one of his uncles of consumption, supervening on hæmoptysis; another of some affection of the heart; and his aunt was, for many years, subject to alarming epistaxis. In his infancy he caught a severe cold from an accidental wetting, and was subject to cough from that

time up to the termination of the first seven years, when the asthma appeared, and continued until the termination of seven years, when it gave place to the cerebral affection, and returned only on the complete removal of the latter disease.

It will appear, from a perusal of this case, that it was accident which led me to adopt, and afterwards to persevere in, the purgative plan of treatment. The vast quantity of fecal matter evacuated after the second purgative, its extreme fœtor, its varied consistence, half scybalous and half fluid, and the dark unhealthy colour which it presented, induced me to have recourse to the same agents, though there was at first but little change in the symptoms. From the marked improvement which shortly afterwards attended the liberal use of drastic medicines, I was encouraged to repeat them on the second and subsequent attacks, and to be careful in keeping an open state of bowels during their intervals. To the other remedies employed I attribute but a very slight curative influence. The quantity of blood lost by leeching and epistaxis could be of scarcely any use, as it did not altogether exceed five ounces. The cold applications were only partial and of short duration, and the mustard pediluvia were not employed, until the middle of the second attack. To the continued purgatives I attribute the cure of the disease; and I am induced to think, that their value, in several affections of the brain and other parts of the nervous system, is very great, and cannot be too highly appreciated. I have lately seen a case of severe brain fever, where there was coma, incoherence, &c., with very slight remissions, for nearly three weeks, recover, by acting on the bowels by purgatives six or seven times each day. Dr. Abercrombie, in speaking of the treatment of inflammatory affections of the brain, says, "In all the forms of the disease, active purging appears to be the remedy, from which we find the most satisfactory results; and, although blood-letting is never

to be neglected in the earlier stages of the complaint, my own experience is, that more recoveries from head affections, of the most alarming aspect, take place under the use of very strong purging, than under any other mode of treatment." The same benefit which attended this plan of treatment in the first case, was equally successful in the second, and the patient, after taking (for her age) very strong purgative medicines for nearly a fortnight, was restored to perfect health.

With respect to the latter case, I did not, for a moment, doubt that the irritation commenced in the brain, and was intimately connected with the suppression of a discharge from the ears of long continuance; but, in the first, I was, for some time, of opinion, that the disease in the head had its cause and origin in abdominal irritation. The circumstances which led me to embrace this view of the subject were, the occurrence of pain at the umbilicus, when an attack came on, the intermission of the cerebral symptoms, and the quantity and nature of the evacuations, &c. I am, however, at present, of opinion, that, in this, as well as in the former case, the disease commenced in the head, and tended to produce the abdominal affection, which, in its turn, may have re-acted on the brain. The pain in the belly, complained of only during the attack, and never before it; the total cessation of the asthmatic paroxysms, on the appearance of the disease; the increased severity which marked the second attack, from using the circular swing; the unaccountable derangement of the bowels on the same occasion, although they had been so carefully attended to in the interval between this and the first illness; the extraordinary throbbing of the carotids; the patient's conformation of head, and habits of thinking, are all circumstances which tend to fix the origin and locality of the disease.

There is one very remarkable feature in the case of Master W. The affection observed all throughout an exact lunar periodicity, there being an

interval of about twenty-eight days between each attack. Of this I was so well aware, that, for the two or three last ones, I always called at the expected time, and found him as I had anticipated, commencing this strange round of symptoms. Is the doctrine of lunar influence to be looked on as one of the dreams of medical philosophy? or does this, and several other instances, as the catamenia, first attacks of epilepsy, hæmorrhoids, insanity, hemicrania, and arterial hæmorrhages, which are frequently remarkable for their liability to obey lunar periods, give support and countenance to opinions, which would appear to belong chiefly to the imaginative infancy of science? It is a well known fact, that there are many persons whose nervous sensibilities reflect with barometrical accuracy the various atmospheric mutations. The crises of febrile disease, and the intimate connexion which seems to exist between their exacerbations and remissions, and the periods of the solar and lunar day, have been long the subject of remark. I am inclined to think, that the consideration of planetary and atmospheric influences on the human system would afford a subject for deep and interesting inquiry, and it is to be regretted, that our means of pursuing the investigation are so extremely limited.

I have, in addition to the above cases, to mention that of a gentleman, in whom there was an hereditary tendency to apoplexy. In his 25th year, after living for some months rather freely, he was attacked by severe head-ache, with sense of fulness, followed by partial paralysis of the lower extremities. Under the use of brisk purgatives, and constant exercise of the affected limbs, he quickly and completely recovered.

5, Sackville-garden, Summerhill.

#### EXTENT OF CHOLERA AT AMSTERDAM.

TOTAL number of cases, up to 29th ult., when no patient remained under treatment, 1496, number of deaths, 792.

#### PROFESSOR HERMANN'S OPINIONS ON CERTAIN POINTS CONNECTED WITH CHOLERA.

IT may be recollected that, in 1830, Professor Hermann, celebrated in Prussia and Russia as a chemist, gave the results of his experiments on the blood of cholera patients during the Moscow epidemic, and then insisted upon, what has been since denied by others, namely, the presence of free acetic acid in the blood *in its normal state*. In a letter which has lately appeared from this gentleman, he is of opinion that further experiments have confirmed this statement. He denies having ever stated that he detected a peculiar acid in the blood of those who laboured under cholera. His opinions on the nature of the disease are perhaps not likely to prove more satisfactory than those which have already emanated from various sources. A specific poison causes, he thinks, "*Polarisation of the nervous fluid, which produces increased activity in the pneumo-gastric nerves, and diminished activity in the ganglionic system. The effect of this polarisation in the first place consists, principally, in the abundant secretion of a fluid possessing chemical properties perfectly identical with those of the gastric juice; and secondly, in a suspension of the absorbing power throughout the alimentary canal. The gastric juice is abstracted from the blood. This abstraction of an enormous quantity of a liquid, the constituent parts of which are principally water, ozmazome, salivary matter, salts, and free acetic acid, causes the decomposition of the blood, which becomes thicker, and diminished in quantity by about eight pounds.*" It may be recollected that, in a note lately appended to one of Professor Magendie's lectures, we pointed out that phenomena, supposed to arise from a diminished quantity of blood, occur in those cases, by no means unfrequent, where little or no discharge takes place from the stomach or bowels.

THE

**London Medical & Surgical Journal.***Saturday, December 22, 1832.*

## THE WORKING OF THE ANATOMICAL BILL.

THE meeting of the medical students, at the Albion Tavern, of which we gave an account last week, has been followed by the effects which we anticipated; the exertion of the authority of the Right Hon. the Secretary of State for the Home Department, and his determination to enforce the impartial operation of the anatomical bill. On Wednesday the 11th inst., the oppressed students presented their memorial at the Home Office, containing 300 signatures; and on the following day, Thursday, the teachers of anatomy in the large schools were commanded to attend the Home Secretary at three o'clock P.M. on Friday, a piece of information we announced in our last Number. We predicted this event, notwithstanding the declarations to the contrary, urged by our contemporaries. But we have the good fortune to be the advocates of no party, and can view things without prejudice. We knew the anatomical act was a public one, intended by the legislature to facilitate the study of medicine, and that the paltry manœuvres of interested teachers, or of prejudiced journalists, or of foolish intemperate students, could never impede its due operation. We were not so simple as to believe, that the brawl-

ings at the Albion Tavern, though calculated to excite a momentary triumph, were adequate to neutralize the execution of a public act of parliament; and we experienced feelings of deep regret, on learning that gentlemen, who belong, or intend to belong, to our profession, should be so foolish as to suppose themselves capable of impeding the administration of the law, which every enlightened member of society is bound to obey. As to our friend in Lincoln-green, we were not at all surprised at his wrath—a partizan is a slave. We confess we were grieved to notice another contemporary opposing and censuring a law which its framers admit to be imperfect, but which is better than no law at all. He ought to know, that it was with the greatest difficulty the Anatomical Bill passed either house of Parliament; and that, once passed, it can be easily amended. To prove the truth of this statement, we must observe that we forwarded copies of the law relative to anatomy in France and America to the benevolent legislator, who was most interested in procuring the bill in question. He politely assured us, that he could not attempt to propose an Act of Parliament on such a broad basis, so great and so difficult was the opposition to his measure; and he observed, with all the philanthropy of an enlightened gentleman, that if the Act were once passed, it could be easily amended if necessary. We ought to be satisfied; and for ourselves we have not the slightest doubt that the Anatomical Bill will be changed if found necessary.

Looking at human nature, we can make allowances for those who are influenced by self-interest. It is natural for those who are well supplied with unclaimed bodies, to consider the new bill perfect; but perhaps it is as reasonable for those who are not supplied, to consider its operations oppressive and unjust.

Since the above was written, we have heard that the Secretary of State intends to command all parish officers to send notice of unclaimed bodies to his office, and that all the schools of anatomy will be supplied according to their wants. This is as it should be, and accords with our views on the subject.

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**PARTIAL SUPPLY OF DEAD BODIES—  
PROMISE OF THE SECRETARY OF  
STATE TO ENFORCE THE LAW IMPARTIALLY.**

*To the Editors of the London Medical and  
Surgical Journal.*

GENTLEMEN,

IN answer to a letter of the 14th inst, which I addressed to the Right Hon. Lord Melbourne, soliciting his attention to the unequal distribution of subjects, and that his Lordship would be pleased to exercise his power over the parochial authorities, for the purpose of effecting a more equitable distribution of unclaimed bodies, his Lordship honoured me with the following prompt and satisfactory reply:

“Whitehall, 15th Dec., 1832.

“SIR,—I am directed by Viscount Melbourne to acknowledge the receipt of your letter of yesterday's date, and to acquaint you, with reference to the subject to which it relates, that his Lordship is anxious to accomplish the objects which the legislature had in view in passing the Anatomy Bill, and will do his utmost, by communica-

tions with the several parishes, and by all other means in his power, to promote the interests of ALL the schools of anatomy in the metropolis.

“I am, Sir,

“Your most obedient,

“Humble servant,

“SM. PHILLIPS.”

As this letter reflects great honour on Lord Melbourne, by exhibiting the just and impartial sentiment therein expressed, which you so accurately anticipated; and as, were it not for his interference, the present disgraceful system must have terminated in the ruin of myself and some other lecturers, I consider it my duty to request the insertion of this in your liberal and really independent Journal.

In reply to a paltry lie asserted by an obscure journalist, that the memorialists who petitioned Lord Melbourne a few days ago, to enforce an impartial administration of the anatomical law, “belonged to a private school, in which their number is not more than a dozen,” I beg to state, that my class consists of not less than sixty pupils, and that the number who signed the petition was about three hundred.

The same veracious journalist says, that “the Bill has worked with astonishing facility (in favour of whom—the monopolists?) considering the very short period it has been in operation; and if those who have been most fortunate *would* but assist those who have been less so, there would nowhere exist any cause of complaint.” But how extremely significant this word *would* is. The voracity of some few of the anatomical teachers to monopolize all the dead human flesh to themselves has been more like ravenous wolves than intellectual beings. Certainly, for having thus attempted to crush other lecturers, by abusing the law, they richly deserve contempt and censure, and one thing I will promise them, that their conduct shall be closely watched, and, if they continue to show a spirit of monopoly, published too, and my pupils' studies

shall not be interrupted by them with impunity.

The law recognizes all anatomical teachers equally, and was intended to administer to the necessities of *all equally*. Are not, then, those teachers who have been kept without a supply of subjects by the monopolists, and consequently without the means of obtaining a livelihood, in the literal sense robbed men?

With regard to the disturbance which disgraced the late meeting at the Albion Tavern, continues this scribbler, the blame does not rest with those who convened the meeting for the purpose of peaceably petitioning the Secretary of State, but with those who riotously opposed their proceedings. And "as nothing can have a more injurious effect in the eyes of the public than variance and disunion," then let the cause be removed, by no teacher striving to continue the monopoly any longer, or in any degree whatever, either openly or clandestinely, or he will entail upon himself the "ridicule," "disgust," and *censure* too, not only of the profession, but the community at large, who are now too enlightened not to see and acknowledge the necessity of anatomy.

I am, Gentlemen,

Your very obedient servant,

G. D. DERMOTT.

Dec. 17th, 1832.

30, Francis-street, Bedford-square.

### Rebirtw.

*A Treatise on Cholera, containing the Author's Experience of the Epidemic known by that name, as it prevailed in the City of Moscow, in Autumn 1830, and Winter 1831.* By JAMES KEIR, M.D., &c. 8vo. pp. 138. Black, Edinburgh; Longman and Co. 1832.

*Official Correspondence on the Subject of Spasmodic Cholera in Ireland.* 8vo. pp. 74. Dublin, 1832. Pettigrew and Oulton.

WE are unable to discover, by a perusal of Dr. Keir's work, whether he

is or is not a non-contagionist. He contradicts himself in many paragraphs, in such a manner, that it is impossible to ascertain what is his real opinion. We are inclined, however, to believe that he is a contingent contagionist; although at page 103 he declares that the disease is not "communicated by simple contact, or by the dead body."

The author is a physician of high attainments, and one holding important public appointments; and therefore his work is entitled to attentive perusal.

The second Essay is a series of military reports, with one exception, furnished at the request of Dr. Renny, Director-general of Hospitals in Ireland, who addressed a circular to the different medical officers under his direction, containing queries on the nature and treatment of spasmodic cholera; also as regards its contagious or non-contagious properties, and the relative value of preventive measures. The first report is from Dr. Barker, Secretary to the General Board of Health, who states, that his experience is extremely limited; but who concludes, from the reports of others, and from the progress of cholera from India to the different parts of Europe, that the disease is contagious. He argues, that the negative fact that few of the medical and other attendants have been affected is insufficient evidence against his conclusions.

He is of opinion, as well as most writers on this subject, that a predisposition is necessary, or, in other words, a loop-hole is wanted for the contagionist to slip out at, when any one exposed to the human effluvia (God save the mark!) is not attacked. The disease has continued in Ireland for more than seven months to 20th of Oct.; the number of cases 41,735; of deaths, 15,115.

Dr. Moore Peile, Dep.-inspet.-gen. of Hospitals, is a contagionist, as also Surgeon Mostyn, 27th reg., and staff-hospital assistant, — Tuthill, M.D.; Dep.-inspet.-gens. Pitcairn and Lindsay; Staff-surgeon Colclough; Dr.

Herriott, of the 9th dragoon-guards; Surgeon Melin, of the 9th Lancers; Dr. Williams, of the 68th reg., and Surgeon Cross, of the 83d reg., are non-contagionists. Almost all think preventive measures useless. Mr. Melin makes rather an extraordinary statement, with which we conclude this article.

“In further illustration of this opinion, the following fact, related to me by Mr. Kirby\*, of Harcourt-street, may be deemed interesting:—During the prevalence of the epidemic in this city, he was driving to his country-house, with his daughter and son-in-law, when, on passing Rathmines, towards the valley of the Dodder, they came in contact with a hanging cloud, when they all, at once, experienced great oppression in breathing, and a peculiar smell, which they simultaneously remarked; it soon passed them, and they noticed that it hung for some time over the church and village of Rathmines. They noticed the appearance of the cloud or mist as peculiar, and its effects on their breathing as remarkable: eat a hearty dinner, and went to bed well. During the night they were all attacked with bowel complaint, and Mr. Kirby had to administer medicine to relieve them. On returning to town the following morning, he was led to make inquiries at Rathmines, and found that fourteen new cases of cholera had occurred; although, previously, but a few straggling cases had taken place in the village.”

*Dublin Journal of Medical and Chemical Science.* Nov. 1832.

THE first paper in our scientific contemporary is by Mr. Carmichael, “On the Use of Tracheotomy in Chronic Diseases of the Larynx, illustrated by Cases.” The justly-distinguished author was convinced, many years ago, that in ulceration of the larynx,

produced by venereal disease, when all remedies failed, it was advisable, before the lungs became incurably diseased, to perform tracheotomy. He suggested this in his valued work on the venereal, and has subsequently acted upon it in several cases with the great satisfaction of having saved his patients. Five cases are detailed in which the operation was successful. The patients seemed to be on the verge of death before tracheotomy was performed. Some of these cases were seen by the late and regretted Mr. Todd, Mr. Peile, and by Mr. Adams, the lecturer on anatomy at the Richmond medical school, who attests one of them. Mr. Carmichael having bared the trachea, transfixes it by a double hook, and removes a circular, or lozenge-shaped, piece from the hook with a scissors. The use of the hook is not original, for we find it recommended by Dr. Murray, late of Belfast, and now physician to the Marquis of Anglesey, in Dublin\*. This gentleman advised the surgeon to raise a piece of the integuments between the finger and thumb, and cut it away, removing the parts down to the trachea. The object of this oval, or circular, wound is, that its retracted edges will be too far distant from the opening in the trachea, and therefore, when inflamed, cannot prevent the ingress of air. The trachea was next to be transfixed by a hook, and removed as already stated. We therefore are somewhat surprized, that no mention is made of Dr. Murray's suggestion in the paper before us, more especially as the doctor's work was presented to the writer, according to the statement of a correspondent of ours in this day's number. We are perfectly satisfied in our own minds, from the integrity and high character of Mr. Carmichael, that he either did not peruse the work of Dr. Murray, or forgot the hint contained in it. A surgeon of his high standing and cele-

\* Professor of the Practice of Physic in the Medical School of the Royal College of Surgeons, in Dublin.

\* See a Dissertation on the Influence of Heat and Humidity, &c. By James Murray, M.D. &c. London, 1829. p. 237.



brity could never violate the law of *meum et tuum*. We regret that our space will not allow us to copy the whole of the instructive cases before us, but we shall give a specimen, and say to our readers, "*ex uno discite omnes.*"

"The first case that occurred to me, in which I performed tracheotomy for this form of disease, was that of a man who had lost the velum and uvula, from venereal ulceration; ulcerated patches were visible at the time of his admission, deeply seated on the back of the pharynx, while the superior part of it exhibited the cicatrices of former ulceration. His voice was so hoarse as to be almost indistinct, while a constant croupy cough, and incessant endeavours to hawk up a viscid phlegm, marked sufficiently the existence of ulceration of the larynx. He was greatly enervated, and so exhausted by the malady and the means which had been previously employed, consisting of mercurial courses and fumigations, blisters, caustic issues, &c., &c., that the late Mr. Todd, in consultation on the propriety of the measure, observed, that any experiment was fair in a case in which all the known means had failed, but that in his opinion, neither operation or any thing else could save the man's life. This operation was however performed, in his presence, that of Mr. Peile, and the pupils of the hospital—and the man experienced immediate relief, rapidly recovered, and was discharged the hospital in three weeks afterwards, perfectly well."

"I shall conclude this paper, which I thought I should have been able to compress within much smaller dimensions, by observing that the operator will find great advantage by employing a double hook, which he may boldly plunge into the trachea, as soon as the rings are sufficiently bared for the purpose. By this measure he fixes a part which it is difficult to operate on with safety, as it is in perpetual motion in a person struggling for breath, and at the same time

situated at the bottom of a deep wound, and surrounded by the most important vessels; but by means of the hook, he is enabled to draw forward the trachea and perforate it with ease. I always employ scissors for this purpose, and cut out a portion of the trachea, as has been fully detailed in two papers on the subject inserted in the 2nd and 4th vols. of the *Transactions of the Association of the Dublin College of Physicians*, in which a considerable number of cases of tracheotomy is detailed, in not one of which was a tube introduced. The opening made in the trachea being found quite sufficient for the passage of air and mucus, and not attended with that irritation which the introduction of a foreign body within the highly sensitive internal lining of the trachea must inevitably occasion.

"Let no young practitioner estimate the performance of tracheotomy by the ease with which it is done upon the dead subject. In the living, the parts we have to divide are often swollen, and so turgid with blood that the successive steps of the operation are observed by a rapid oozing of blood with every touch of the knife. The person upon whom we operate is all anxiety, and struggling for breath. In order to avoid the thyroid gland, you must frequently make your incision so low in the neck that it comes upon the sternum, and it will be found often necessary to open the trachea close to the sternum, where it is most deeply situated, and where the surgeon runs the risk of opening the arteria innominata or subclavian vein, or even one of the carotid arteries (the left,) where both arise from the arteria innominata. In young subjects, also, upon whom the practitioner is so often called upon to operate, in cases of croup, the rising of the thymus gland upon the trachea, until it even touches the thyroid gland, in the struggles of the young patient to breathe, also renders this operation very difficult, and demands, upon the part of the operator, the

utmost coolness and collection of mind; and when, with all these embarrassments, he knows that anomalous large arterial branches often course in front of the trachea, it will be readily allowed that there is cause for as much anxiety in the performance of this, as of any operation in surgery. But if the practitioner is obliged to perform it at night, the difficulty is greatly increased; for it is impossible, as I have often experienced, to throw the light of a candle into a narrow and deep wound, so as to enable the operator to see the parts it is necessary to divide.

“Under all these circumstances, after the first incisions have exposed the dense junction of the muscles in front of the trachea, it is better to lay the latter bare, by scraping with the nail, the director, or any blunt instrument, than to use the knife in a deep wound, obscured by blood, and in the midst of important vessels which you cannot see. When the trachea is rendered sufficiently bare to admit of being seized upon by the double hook, the remainder of the operation, although the most important part of it, is comparatively safe, and may be completed either with the knife or scissors. If with the former, after the trachea is pierced with a sharp-pointed knife, a round piece of it may be cut or scooped out (including that transixed by the double hook) by means of a straight-buttoned bistoury. If with the scissors, a lozenge-shaped piece may be cut away, as was particularly described in my paper on the subject, inserted in the 4th vol. of the *Transactions of the Association of the College of Physicians*.”

There is an exceedingly interesting case of ulceration of the larynx, the patient being a lady of about fifty years of age, residing at Belfast, which is attested by Dr Purdon and Mr. M'Cluney, in which a complete cure was effected by tracheotomy, performed by Mr. Carmichael; and this is succeeded by another, detailed by Mr. Adams, lecturer on anatomy, at the Richmond Medical School,

which was caused by a fine boy having sucked in a boiling infusion of tea through the spout of a tea pot: a cure was also effected in this instance. The paper is concluded by a detail of the difficulties encountered in performing tracheotomy. We consider this paper highly valuable; as it must convince the profession of the efficacy of an operation in a disease hitherto incurable.

The next paper is by Professor Graves, and is entitled “Observations on the Treatment of various Diseases.” In this paper we find a vast deal of practical information. The first case is one of loss of voice, in a young lady, aged 20. Her disease arose from laryngitis, and repeatedly relapsed in despite of all measures. At length she was mercurialized, when a complete cure was effected.

Dr. Graves remarks, that spinal irritation on the right side, connected with hysteria, was formerly mistaken for hepatitis, and he relates a case in point. He next describes a case of chronic purpura cured by oxymercurate of mercury; and another of extensive disease of the stomach, unaccompanied by any symptoms. On dissection there was a tumour somewhat resembling a mushroom in appearance, situated in the middle of the large curvature of the stomach. This growth was totally unconnected with inflammation, and had assumed, in one point, a fungous appearance.

A most extraordinary case of ulceration of the stomach succeeds the former, in which there was the cicatrix of a very large ulcer, unconnected with scirrhus, at the side of the pylorus. The mucous and muscular coats of the stomach were destroyed, and the serous one formed a little sac, into which a portion of food passed, and the distention caused by this pressed on the pylorus, and completely prevented the progress of the food. The stomach was otherwise healthy. The symptoms were coffee-coloured vomiting, which ceased after some time, and a sensation as if the food stopped at a certain point. The lady was also at-

tended by Mr. Crampton, surgeon-general, Dr. Marsh, and Dr. Ireland. We have been present at an autopsy today, with Mr. Appleton, one of the parish surgeons to St. Andrews, and Mr. Dermott, the lecturer on anatomy, which further shows the obscurity of diagnosis in gastric disease. A woman, aged about 60, had all the symptoms of severe dyspepsia, together with those of chronic hepatitis. She was much emaciated, had no appetite, and relished porter only. On examination, the pylorus was found one mass of scirrhous adherent to the adjacent parts, ulcerated on its inferior surface, while the liver was of greyish, granulated appearance. She never complained of pain in the region of the pylorus, nor had she pyrosis or gastralgia.

A curious case of feigned disease concludes this paper. A young female was attended by several practitioners, all of whom her disease puzzled. The alvine discharges contained substances of an unusual appearance. Some of these were considered gall-stones, and one of them the nidus of a table worm, which was forwarded to Dr. Barker, the learned professor of chemistry in Trinity College. At length it was discovered, that the gall-stones were coarse pebbles, and the worm's nest, the pulp of an orange. We would recommend the first attendant of this patient, for Dr. Graves was merely consulted, to employ, on similar occasions in future, a very efficient military medicine, called the *mistura diabolica*, which generally proved effectual. It was composed of the sulphate of soda, aloes, *asafœtida*, and tartarized antimony, and generally brought malingersers to their senses in a very few hours.

and Lecturer on Midwifery at that Institution. 8vo. pp. 23. Plates. Manchester, 1832.

It is the design of the author to give a short account of the above objects of inquiry; in doing which he differs from Velpeau, who denies the organization of the *membrana decidua* at any period of gestation, a denial that appears to the author totally unfounded: he also differs from him, as well as Burns, on the requisites necessary for the perfect formation of the placenta. The writer goes on to describe this membrane, and its mode of communication with the uterus, which he affirms to be a direct vascular communication, as shown by the experiments of Chaussier, Dr. Williams, Magendie, and others; also by the infectious diseases of the mother being communicated to the *fœtus*, and the absence of synchronism between the pulsations of the *fœtus* and that of the mother. He appears to have given the subject great consideration, and has favoured the profession with a well written pamphlet. The following extract shows the learning and research of the author.

"The Doctor finds his opinion on the following facts. 1st. That if the placenta be examined in connexion with the uterus, which has not been disturbed by injection, &c. that no large blood vessels are to be detected passing from the uterus into cells in the placenta. He admits that numerous small vessels are to be observed proceeding to the *decidua*, but are not peculiar to this membrane, which intervenes between the placenta and the womb. 2d. If air be forced into the uterine vessels whilst the placenta adheres to the uterus, the inner membrane of this organ is raised, but the air does not pass through the *decidua* into any part of the placenta. 3d. The uterine surface of the placenta is invariably covered with the *deciduous* membrane, and no openings in it can be perceived, nor any appearance of vascular tubes continued through this

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*On the Structure of the Human Placenta, and its Connexions with the Uterus.* By THOMAS RADFORD, Senior Surgeon to the Lying-in Hospital and Dispensary for the Diseases of Women and Children,

membrane into the placental cells.—4th. On the results of an inquiry made by Dr. Nimmo and Mr. Broughton, into the state of the preparations deposited in the Hunterian Museum, Glasgow, and also on his own examination of the preparations in the Museum of the Royal College of Surgeons, London. Dr. Burns, of Glasgow, has published a subsequent statement of the preparations belonging to the late Dr. Hunter, in which conclusions are drawn opposed to those of Dr. Lee, and consequently affirmative of the Hunterian doctrine. Since this paper just referred to was published, he has had an opportunity of investigating the parts in their recent state, 'which (he says) will give more satisfactory information than can be derived from the inspection of the preparations.' In the subject of this inquiry, he injected both the uterine arteries and veins, but not those of the foetal or umbilical system. After detailing the conditions of the several parts which were very minutely examined, he comes to the following general conclusion, which we will give in his own words. 'This dissection proves distinctly the intimate structure of the placenta to be as Dr. Hunter supposed, cellular in the maternal portion, and arborescent or branching in the foetal. It proves the existence of intervening portions of soft canals, going from the openings of the arteries and veins, on the inner surface of the uterus, to the cells of the placenta. These canals, when injected, may be left attached either to the uterus or placenta, but are with equal readiness separated from both. We cannot trace them, as trunks, into the placenta, for they terminate in cells, which they cover; neither can we always expect to find them adhering to, or projecting from, the uterine or placental surface, being so easily broken or brushed off. It also illustrates the readiness with which uterine hemorrhage may be produced by the rupture of one of these fragile portions, especially of the sinuses. Strength and defence are afforded by the inti-

mate adhesion of the ovum to the uterus; but if separation take place, the vessels are left unsupported; and if not necessarily torn in the act of separation, they must be soon ruptured, and blood will be discharged. The coils of the arteries may also render them less apt to be torn by any pressure on the uterus, or change of shape produced.' The question at issue between the writers just quoted, is simply this: is the placenta of double origin partially depending upon the mother, and partially upon the foetus? or is it altogether belonging to the foetus? Both sides of the question are advocated with great ability, and facts brought forward by each writer, which he considers as conclusive of the justness of his views and the stability of the doctrine he supports. In a question of so much importance as that of the placental circulation in reference to hemorrhage, it becomes the duty of every scientific inquirer to advance any theory which may influence the cause of humanity. Impressed with this feeling, we have ventured to state our views and the facts which have formed their basis, and if our opinions in any essential degree differ from those already advanced, we trust that they will be received with that spirit of liberality which should ever characterise scientific inquirers."

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NAPOLÉON'S PULSE WHEN IN HIS ORDINARY STATE OF HEALTH.

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DR. ROCHOUX remarks, in his *Essay on Cholera*, that men distinguished for high intellectual powers have usually a feeble circulation of their blood. As a remarkable instance, he states that the Emperor Napoleon's pulse was very feeble, and not more than forty in a minute. Mr. Barry O'Meara, in his *Voice from St. Helena*, states that the emperor's pulse was fifty-four.

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## Hospital Reports.

## ST. THOMAS'S HOSPITAL.

## SCIATICA.

JOHN SWINNEY, of bilious temperament, was admitted into Jacob's Ward of this Hospital, November 8, under Dr. Elliotson. States that he has suffered thirteen weeks from pain in the right hip, thigh, and leg; the pain taking the course of the sciatic nerve. The pain first commenced in the hip, and extended gradually down to his leg; the pain in the hip and upper part of the thigh is relieved by heat, but in the lower part and leg always remains the same. Nine weeks ago he was jaundiced, and for the last four weeks has been an out-patient of this hospital. Has been always accustomed to drink hard, his allowance being in general ten to twelve glasses of gin, or rum, besides four or five pints of ale daily. Bowels regular; tongue white; pulse natural.

9. *Acupuncture.* Two needles in the right buttock, two in outer part of the thigh, and two in the calf of the leg.

13. The needles have been regularly used since the 9th. The pain has greatly diminished in the hip and thigh; this part was relieved by warmth; but the lower part of the thigh and leg continue as bad as ever, and were not relieved by warmth, but always remain stationary.

*Appli.—Hirudines, xx. dextro cruri*  
*Tinct. guaiaci ammon. ℥j. ter die.*

15. The pain in the lower part of the thigh and leg has greatly diminished since he has taken the medicine, and applied the leeches, the acupuncture being continued: the pain in the hip and upper part of the thigh continues to get better. Health good; bowels regular; pulse natural; tongue still rather white.

16. The pains in his hip, thigh, and leg remain much the same as yesterday, but now complains of severe pain in his loins.

*V. S. ad ℥vij.*

*Two needles to be placed in loins.*

18. The pain in the lower part of thigh and leg entirely left him, but still complains of the pain in his loins, hip, and upper part of the thigh.

20. The pain in the loins has left him this morning: he only complains of the pain in his hip and thigh.

23. The pains are much better in his hip and thigh. The man continues perfectly well in health.

26. The pain continues in his hip, but very slight, and is relieved by heat. In the leg the pain has returned, but is not relieved by heat. Tongue natural; pulse regular; bowels open once a-day.

*Baln. calid. quotidie.*

*Acupuncture, two needles in the back part of the calf of the leg.*

30. The pains have left his thigh and leg, but again returned in his loins.

*Needles to be discontinued.*

*C. C. ad ℥x. lumbo.*

Dec. 2. The pains have entirely left him, and he appears perfectly well.

4. Continues well. Dr. Elliotson presented him for Thursday, when he left the hospital.

## COLICA.

John Bradford, aged 55, a letter carrier, admitted into Jacob's Ward, October 25, under Dr. Elliotson. Has been for the last seven months, more or less, confined in his bowels; before that time, they had always been regular. Since he has been in this state, if he does not take some purgative medicine every two or three days, he has nausea, and vomiting, soon followed by violent spasmodic contractions of his abdominal muscles. This was the case when admitted; his abdomen being hard and tumid; purgative medicines, he says, produce an immense discharge of hard, lumpy, feculent matter; and after his bowels have been freely open, he feels perfectly well for a day or two, when

the same thing occurs again. Countenance anxious; tongue natural; bowels regular; pulse natural.

*Habeat ol. ricini, ℥ss. statim et rep. 3ia quaque hora donec alvus soluta fuerit.*

26. Bowels have been freely open from castor oil, an immense quantity of hardened fæces were discharged from them. Since then, felt perfectly well; appetite good; bowels regular; pulse regular.

*Habeat Ol. crotonis gtt. ½ ter in die.*

28. His bowels have been freely open since he has taken the croton oil daily; alvine dejections watery; feels in no pain; pulse regular.

*Continuetur oleum.*

30 Bowels open three times a-day from the medicine; stools watery; complains at times of sharp pains flying about his abdomen.

31. Has vomited three times since last evening, and again suffered from the spasmodic contractions of the abdominal muscles. At this time, 12 o'clock A.M., the sickness has subsided. Tongue rather foul; pulse small and feeble.

Nov. 4. Has continued pretty well since the 31st. This morning had a slight attack, which, in the course of two hours, entirely left him. No appetite; pulse full, rather quick and weak.

6. His bowels have been open several times for the last two days. He appears to-day very weak in consequence.

*Ol. crotonis gtt. ¼ quotidie. Inf. gentian, ℥ij. ter in die.*

9. Has had one attack of the spasms since last report, it was not accompanied with sickness; appetite a little better since he has taken the gentian.

*Meat daily.*

13. Has continued to mend since 9th; bowels open three times in the twenty-four hours; tongue rather whiter than natural; pulse soft and full, 66.

*Porter lb. j. daily. Pergat in usu medicamentorum.*

14. This morning he does not complain of any pain, but feels very languid; appetite very bad, cannot take either his meat or porter.

15. Has been very bad with the colic pains during the night; bowels confined.

*Ol. croton ℥. ¼ statim et rep. 2da quaque hora donec alvus soluta fuerit.*

16. After he had taken three doses of the croton oil, his bowels became freely open. This morning he again appears much better; bowels not open to-day.

*Ol. croton ℥. ¼ quotidie, et rep. 2da quaque hora donec alvus soluta fuerit.*

17. Bowels have been freely open this morning; alvine dejections rather lumpy. He is now getting very thin.

19. Has suffered much from pain since Sunday evening, chiefly from the spasmodic contractions of the abdominal muscles, and since that time, until this morning, his bowels have not been open. Since the cathartic medicine, he has been free from pain. The stools consisted of a large quantity of hardened fæces, mixed with watery evacuations, and of a light brown colour.

23. Has had one slight attack since last report. Bowels open; no appetite; pulse regular, but weak. Fancies he could take some milk.

*Milk Oij. daily.*

26. Continued free from pain since the 23d, until yesterday afternoon; then the spasms returned, but not so bad as usual. Bowels open three times a-day from the medicine.

*Pergat. in usu medicamentorum.*

30. Has had two slight attacks since last report. He has been obliged to take the medicine every two hours to keep his bowels open. Countenance become more anxious, and of a yellow-brown colour.

Dec. 2. Eight o'clock P.M. The spasms returned very severe this evening. He has been taking the medicine every two hours during the day, but his bowels are still confined.

*Enema commune statim.*

3. Bowels open. Better.

4. Has been easy for two days. To-day, when Dr. Elliotson saw him, he begged that he might be discharged. Dr. E., not thinking him in a proper state to leave, recommended him to stay another week or two, which the man immediately consented to.

Six o'clock P.M. Attacked with violent spasms of the abdomen, and also with acute pain in the right hypochondrium; bowels not been open for six hours. This attack appears more violent than any he has had since he has been in the hospital.

*Enema opii. statim.*

Vesp. After taking four pills, his bowels became open; spasms better; appears much exhausted from pain. Mr. Stone saw him, and ordered

*Conf. rutæ, ʒj. ex aquæ menth. pip. statim.*

5. Nine o'clock A.M. The man has been in acute pain during the night; the pain confined to the right hypochondrium, the pain is greatly increased by pressure. Breathing affected; inspiration short and quick; expiration hurried, and complains of pain on each inspiration; tongue furred; thirst; pulse sharp, quick, and hard. Mr. Stone saw him at this time.

*V. S. ad lb. j.*

Two o'clock P.M. Much relieved by the bleeding, but still his breathing is much affected, and complains of pain in the right side, also of the spasmodic pains about his abdomen. Countenance very anxious; pulse frequent, but not so hard as in the morning. Dr. Roots saw him for Dr. Elliotson, and ordered

*Muriat. morphiae, gr. j.; statim.*

*Cataplas. sinap. abdomini.*

*Vesp. Balm. calid si dolor maneat.*

Eight o'clock. Since he has taken the morphia, appears a little easier. To-day has taken six pills, that is, three drops of the croton oil, and his bowels have not been open. His breathing still remains affected, and

the pain in the right side is aggravated by pressure.

*Rep. balm. calid.; rep. morphia muriat. et cataplas. sinap. abdom.*

*Enema commune statim.*

*Beef tea (strong) Oj. daily.*

6. Felt sleepy; but scarcely got any rest during the night. This morning, although his breathing is affected, he does not complain of so much pain. Extreme anxiety of countenance; tongue furred; pulse small, quick, and feeble; weakness excessive. Bowels open early this morning.

Eight o'clock, P.M.: appears evidently sinking; pulse small, very frequent, 120.

7. Three o'clock, A.M. he died.

*Autopsy.*—Upon examining the chest, about a pint and a half of purulent fluid escaped from the right side of the cavity of the pleura, containing flakes of lymph; lungs and heart healthy. The stomach was found distended with flatus; duodenum had become cartilaginous and contracted; an ulcer was situated in it, which had entirely, for a small space, destroyed the three coats, and this part firmly adhered to the pancreas. A large quantity of feculent matter was found in the alimentary canal; the remaining viscera were healthy.

## WESTMINSTER HOSPITAL.

*Ulceration and gangrene of the appendix cæci vermiformis—Phlebitis of the right iliac vein.*

AN aged woman of the name of Shoobred was lately admitted into Anne's Ward for abscess in the perinæum. She was affected with symptoms of inflammation and ulceration of the intestinal canal; she had also difficulty of breathing. A short time before she died, the right leg swelled considerably, and the *facies hippocratica* was exceedingly well marked.

The body was examined on the

16th of Dec., about 48 hours after death: it was exceedingly emaciated. The lungs were very much diseased; the upper lobe of the left lung contained a large abscess or vomica capable of containing the doubled fist. The greater part of both lungs were studded with tubercles in various degrees of softening, and numerous vomicæ; there were also adhesions between the pleuræ of that side. There was rather more fluid than is usual in the cavity of the pericardium, but the heart appeared healthy. Ulcerations were evident in the mucous membranes of the intestines: the *appendix cæci vermiformis* was found ulcerated and gangrenous, and instead of terminating in a *cul de sac*, there was a large opening, formed by ulceration, communicating with the cavity of the pelvis. Its edges were thickened and affected with inflammation. The mucous membrane of the cæcum caput coli was injected, thickened, and ulcerated; the appendix vermiformis was found in close apposition with the right iliac vein, and, from the swelling of the right limb which had occurred, it was suspected that that vessel had been affected by an extension of the inflammation. It was accordingly slit open, and found to be filled with semi-coagulated and decomposing blood, with lymph effused to a considerable extent; the part more immediately in apposition with the appendix was contracted, and immediately above them was a healthy clot of blood. The coats of the veins were thickened in their whole extent.

#### PREVENTION OF DANGER IN THUNDER STORMS.

To prevent the dangers that result from the electric fluid, we should make use of some precautions. The first, and safest of all, is to have a conductor, or kite, put on the house we inhabit. These conductors are constructed on the following principles, as recommended by the celebrated Dr. Franklin. The resistance made by

electrical bodies in yielding their electricity, is much diminished when the conductors presented to them terminate in a sharp point. These conductors are not charged with electricity when they communicate with the earth, which is the common reservoir. An electric kite then is only a metallic conductor, that attracts an electric cloud, and which does not continue surrounded by an electric atmosphere, but transmits the electric fluid to the earth as soon as it is received. We should avoid, during a thunder storm, very elevated places and houses, particularly those that terminate in a point; we should not take shelter in churches, nor under trees, even when they are resinous; we must be careful not to cause currents of air, neither by opening the doors or windows of a room, by walking quickly, nor by galloping; for it has been remarked that the electric fluid, in its descent, frequently follows the direction of the currents of air. The amusement of flying a kite is very dangerous in stormy weather, for if the cord becomes damp, it will serve as an electric conductor to draw down the cloud to the earth.

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#### DEPUTY-INSPECTOR MARSHALL'S ACCOUNT OF THE COCO-NUT TREE.

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TODDY.—This is the name given by the English to the sweet juices which are extracted from the different species of the palm tribe, including that of the coco-nut tree. It is perhaps a corruption of *tari* or *taree*, the Musulman name of the juice of the Palmyra palm, of which *tar* or *tal* is the Sanscrit name\*. *Ra*, which literally means juice, is the Singhalese name of the fluid extracted from the flower of a coco-nut tree. Sometimes it is called *mee-ra* (honey or sweet juice;) when prepared for making *jagery*. Among the inhabitants of the maritime provinces of Ceylon, it is fre-

\* Buchanan's Journey through Mysore, &c



quently denominated *suri*, which is said to be a Sanscrit word. With the above explanation, the words *toddy*, *ra*, *mee-ra*, and *suri*, may be used synonymously. Fresh drawn juice is sweet, and has a peculiar flavour, in consequence of some extractive matter it contains; and, in general, it operates as a laxative. When it is intended to distil arrack from *suri*, the toddy-drawers seldom change or clean the pots into which it is received, hence the juice soon ferments, and emits an acid smell. In a half fermented state, *suri* is much relished by some Europeans. When it has become, by fermentation, highly intoxicating, the European soldiers, and the dissipated portion of the natives, drink it freely. To render this beverage acrid, the soldiers occasionally add green *chillies* (*Capsicum frutescens*) to it.

It is not very probable, that the "strong drink," mentioned in Scripture, was *mee-ra*, drawn from the flower or terminal bud of some of the palm tribe, perhaps the date tree—palm wine\*? In several of the Oriental languages, there appears to be an intimate connexion between the words which designate honey, sugar, sweetness, and the juice of plants of the palm family. *Mee*, in the Singhalese language, means honey, sweet; and the toddy or juice extracted from palm trees is called *mee-ra*. Juice drawn from the flower of the Sago-palm, is, by the Malays, denominated *Aer* (water) *saguer*. As the word *saguer* appears to be only a slight alteration from the Sanscrit adjective implying *sweet*, *aer saguer* will therefore literally mean *sweet water*, or the *sweetest water*. In the Javanese language, the Juice of the Gomuti-palm is called *lagen*, which means the *sweet material* by

\* Judea is typified on several coins of Vespasian by the figure of a disconsolate woman, sitting under a palm-tree. In Deut. xxxiv. 8, Jericho is called "the city of palm trees." It may be presumed, therefore, that one or more species of palm trees were formerly much cultivated in the Holy Land.

distinction\*. We learn from Shaw, that the Hebrew word rendered *honey* in Scripture, is, by some commentators, supposed to denominate the sweet juice procured from palm trees, as well as the honey of bees. He tells us that, in Barbary, the sweet juice extracted from date-palms, is called *dipse*; and that *dibse* or *dipse*, which is a Hebrew word, is generally translated *honey* in the Old Testament. Dr. Moseley, in his Treatise upon Sugar, &c. says, that the strong drink of the Scripture was called *shecar*, a word which likewise means *intoxication*. This word *shecar* does not differ much in enunciation from the Sanscrit adjective, implying *sweet*; and it very closely resembles the Malay name of the intoxicating toddy of the Sago-palm (*Aer saguer*.) Dr. Moseley concludes his disquisition on the strong drink of the Old Testament, by saying, "What sottish liquor *shecar* was, no person knows. It was probably made from grain, perhaps from honey." Our term *cyder*, which exclusively implies the fermented juice of apples, is supposed by Dr. Clarke to be derived from the Hebrew word *shecar*, designating "*strong drink*." St. Jerome says, any intoxicating liquor obtains the denomination of *siker* or *shecar*, whether it be made of corn, apples, honey, dates, or fruits of any kind. *Shecar* seems to have become *sicera* (Latin) afterwards corrupted into *sidera*, hence *cyder*.

\* Crawford.

## NECROLOGY.

DR. SPURZHEIM.

THIS renowned phrenologist died last month of brain fever, at Boston, United States, in the sixty-eighth year of his age. He accompanied Dr. Gall over great part of Europe, visiting every place that could furnish matter that would advance the science of phrenology. His death, no doubt, will be deeply regretted by his numerous followers.

Amount of Subscriptions already received, in aid of Dr. Ryan . . . £172 19 6

List of Books and Notices to Correspondents in our next.

## LECTURES

ON THE

## PRINCIPLES, PRACTICE, &amp; OPERATIONS OF SURGERY,

Delivered at the University of London,

SESSION 1832—1833,

BY

PROFESSOR SAMUEL COOPER.

LECTURE XIV., DELIVERED NOV. 1, 1832.

GENTLEMEN,

In the latter part of the lecture of yesterday evening, I enumerated the constitutional symptoms of mortification when it is preceded by acute inflammation: amongst those symptoms, I mentioned *hiccough*, which deserves your particular attention, because it is one of the chief circumstances by which we judge of the state of internal parts threatened with mortification—parts which we cannot see, and, on which account, we are obliged attentively to consider every symptom which is presented to us. Thus *hiccough* is a symptom, which every practical surgeon has a well-founded apprehension of in cases of strangulated hernia, where it is a good ground for suspecting gangrenous mischief within the hernial sac, and, indeed, it is nearly a sure indication of this unfavourable state. I say *nearly*, for *hiccough* will sometimes take place in strangulated hernia, though the protruded bowel may not have mortified: thus, one patient, whom I attended the autumn before last, and whom I operated on for a strangulated congenital hernia, had *hiccough* as a prominent symptom for four or five days before the operation, yet it appeared, that there was no gangrene of the contents of the hernia. You must not, therefore, infer, that gangrene is certainly present in every instance of strangulated hernia, in

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which *hiccough* is a symptom, but it is an unfavourable omen, and *generally* denotes mortification.

The constitutional symptoms, which I have described, attend *acute* mortification: those, which are produced by *chronic* mortification, or *dry gangrene*, are often of a slower character, and the patient will sometimes live for several weeks, with a pulse, ranging between 100 and 120, with his stomach but little disturbed, and his intellectual functions tranquil, till within three or four days of his death. Of these facts, when I come to the consideration of *gangræna senilis*, I shall have occasion to mention to you a remarkable instance, which occurred in a gentleman, whom I attended, with Sir Astley Cooper and Mr. Hughes, of Holborn.

Gentlemen, I must next notice a very curious circumstance, in relation to mortification; one which every experienced surgeon is aware of, namely, that, when a portion of the body mortifies, or is about to mortify, the large arteries leading to it become blocked up with coagulum; this prevents hæmorrhage from taking place on the separation of the slough, and, if the vessels were not thus closed, many persons would bleed to death, or require the assistance of a surgeon on account of hæmorrhage. The large vessels, which are at first blocked up with coagulated blood, become afterwards permanently closed by the adhesive inflammation, and other changes, which I will describe when speaking of *hæmorrhage*. This coagulum, which, as all practical surgeons know, extends within the artery up to the first important collateral branch, is probably formed on account of the interruption to the circulation which takes place in consequence of its entire cessation in the mortified parts; but whatever may be the cause of it, its utility is sufficiently evident. The fact explains why, when we amputate gangrenous limbs, there is sometimes no bleeding from the large arteries, and no occasion for ligatures. It also lets you understand why hæmorrhage is of rare occurrence on the detachment of a slough, at least in the common forms of mortification, for

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bleeding will sometimes take place from phagedenic sloughing sores, and from parts attacked by hospital gangrene.

Gentlemen, I will now make a few observations on the *prognosis* in mortification. The prognosis is much influenced by the nature of the exciting causes, and whether they admit of removal or not. If mortification originate from organic disease of the heart, or of the semilunar valves of the aorta, or from extensive ossification of the arteries, it may be regarded as incurable, because we have it not in our power to remedy those particular states of the heart and arteries, which bring on, or promote, the occurrence of the disorder. On the other hand, if mortification arise from any kind of pressure, irritation, or friction, which can be effectually removed, we may entertain the hope of stopping the progress of the disease. Thus, if sloughing of the cellular membrane of the scrotum and perineum arise from the irritation of effused urine, we may perhaps diminish its extent by making an incision in a depending situation for the discharge of the urine, and then introducing a catheter into the bladder to prevent a renewal of effusion. By these means, if we cannot prevent mortification altogether, we may considerably lessen its extent; but in this instance, we cannot generally remove the exciting cause completely, because the urine is of so stimulating a nature, that the presence of a small quantity of it, even for a very short time, will be sufficient to do the mischief, before we can take measures for its discharge; yet, by procuring the discharge of as much of it as we can, we are doing whatever is practicable to diminish the extent of the mortification.

In all cases of mortification, the prognosis depends also, very materially, on the age, strength, and constitution of the individual, the greater or less importance of the part affected, and the rapid or slow progress of the disorder. When it arises from internal causes, when it occurs in a bad habit of body, a constitution ill suited to bear disease of any kind, there is generally excessive danger, while a limited sloughing, from external violence, in a healthy constitution, may not be attended with any severe or perilous symptoms whatever. On the other hand, when the constitutional symptoms are violent, and the mortification extensive, attended with coma or delirium, the chances of recovery are nearly hopeless.

I have stated, that when mortification arises from internal causes, it is particularly dangerous; hence, chronic mortification of the feet, in elderly persons, is exceedingly fatal, perhaps not one patient in twelve recovering from this form of mortification, which receives the name of *gangrena senilis*. Hospital gangrene is another dangerous species of mortification, often productive of great mortality in military hospitals, or others crowded with wounded or ulcerated patients.

Gentlemen, I next enter upon the consideration of the *treatment of mortification*. In

every species of the disorder, there are three principal indications:—

1. To stop the progress of the disorder.
2. To promote, or effect the separation of the mortified from the living parts.
3. And to heal the ulcer, or wound, resulting from the detachment, or removal of the mortified parts: I say *wound*, because this will present itself when an operation has been necessary for the accomplishment of the second indication.

With regard to the first indication, or *that of stopping the progress of the disorder*; we are here led to consider the nature of the exciting cause, and whether or not it will admit of removal. Now, if the mortification has followed intense inflammation, we must endeavour to find out, if possible, what has been the cause of such inflammation, and ascertain whether it is still in operation. The removal of the exciting cause of a disease is a common principle in surgery: we see its necessity exemplified not only in this, but in every other case. It is sometimes in our power to remove the exciting cause altogether, as when we discharge effused urine by suitable incisions, or when we take away extraneous substances, balls, splinters of bone, &c., or remove irritation in a thousand forms. We do the same thing when we remove pressure or strangulation of parts, having the effect of exciting mortification; or when we take a patient, labouring under hospital gangrene, away from the crowded ward, or hospital, in which he has caught it, and place him in a purer atmosphere. All these measures amount to a suppression of the exciting cause. Also, when mortification arises in consequence of the patient having lived upon unwholesome, deleterious food, such as vitiated or cocks-pur rye, or other bad grain; if we give the patient better diet, and interdict that article which has led to the origin of the disorder, we are fulfilling the same useful indication; in short, in all these instances, we are removing the exciting cause. When mortification is kept up by hurtful applications, and we apply in lieu of them more judicious dressings, such as are suited to the nature of the case, we are likewise removing the exciting cause; and, gentlemen, let me observe, that you will frequently see sloughing excited by the exact nature of the diseases not being at first made out, and wrong plans of treatment being instituted. Then, when we afterwards resort to remedies better suited to the case, we are, in fact, removing the exciting cause.

Frequently, however, when mortification arises from intense inflammation, the exciting cause is only of momentary duration: it has ceased, and the injury leading to mortification has been done before we even see the patient. Here the mischief that has been inflicted must be followed by violent and extensive inflammation, and more or less sloughing be the result, as is too often exemplified in bad gun-shot wounds and severe compound fractures. Here

the removal of the exciting cause is out of the question: the external violence is no longer in operation; but its effects remain, and must be followed by certain bad consequences.

Gentlemen, I believe no experienced surgeons doubt, that the extent of mortification may be materially influenced by the mode of treatment adopted in an early stage of it, or even in that termed *gangrene*. In specifying the causes of mortification, I mentioned to you exposure to severe degrees of cold. Now, such exposure is rather a predisposing than an exciting cause. Thus, if a limb were to be subjected to severe cold, and be afterwards brought near a fire, it would immediately inflame, and portions of it, or even the whole of it, mortify. If the cold had been as great as that to which Bonaparte's soldiers were exposed in Russia, the mortification would, under such circumstances, spread up the limb with wonderful rapidity. Baron Larrey assures us, that the mortification might actually be *seen* to extend up the limb, while the eyes were fixed on the part. This, he says, is a fact, which he repeatedly noticed, and it must impress us with an idea of the surprising quickness of the ravages of this species of mortification. Here the predisposing cause is the exposure of the parts to cold—the exciting, their having been suddenly thawed, or brought into a warm room, or near a fire, while weakened, or under the influence of the effects of the cold, whatever those may be. In such cases, gentlemen, we have considerable power to prevent and limit the sloughing; for it is manifest, that though persons, after exposure to intense cold, when suddenly brought near a fire, will most probably be attacked by mortification, which nothing will check, yet if we let the transition be gradual, and if we cautiously guard against all sudden communication of heat, there will generally be no mortification at all. This is one of the strongest examples which I can specify, proving the great influence which the removal of an exciting cause has in preventing mortification, or diminishing its extent. The same fact is illustrated in the good effect of a change of posture in stopping mortification over the sacrum, and other parts of the pelvis and back, in patients confined for a long time to bed by fevers, injuries of the spine, or other tedious aces.

When the destruction of parts is the effect of violent inflammation, we are bound to conclude—nay, we positively see, that the surrounding parts are inflamed in the highest degree. Reason and experience both concur with respect to the general propriety of antiphlogistic measures in this state and species of mortification; but you must pursue the plan with caution and moderation; it is decidedly proper while marks of active inflammation are still manifest, and the disease continues combined with inflammatory fever. Yet you must not proceed too boldly with depletion, because, as I have already stated, the

transition from strength to debility is here very sudden indeed; so that if you were to bleed freely in the early stage of mortification, you would soon lose the patient by the prostration, which would surely and rapidly follow. In fact, you can seldom venture beyond topical bleeding: the moderate use of leeches and mild saline purgatives, with low diet, is the utmost extent to which it is safe to push antiphlogistic measures, and that only for a short time. In this stage, gentlemen, you should do all in your power to soothe the inflammation around the gangrenous part, not merely by the occasional use of leeches, but by warm emollient applications. The necessity of attending to the caution I have given, of not pushing rigorous antiphlogistic measures too far, must be evident enough, when you recollect the fact, that when a considerable portion of the body dies, the shock is felt throughout the system; the increased action in it stops, as it were, without any notice; and we can scarcely say, that a perceptible interval takes place between the sympathetic inflammatory fever, characterized by a strong, frequent, full pulse, with every other indication of power, and another state of the constitution, where the predominant symptoms are extreme dejection of the vital powers, and universal derangement of the nervous system.

Not many years ago, the treatment of mortification was conducted on a most erroneous principle; this was the case when I was a student. At that time, bark was fancied to have a specific virtue in resisting the progress of mortification, in consequence of which idea the patient was literally crammed with it. I remember the surgeon for whom I dressed, at St. Bartholomew's Hospital, had a short way of ordering a patient what he regarded to be bark in adequate quantity: his expression used to be, "give him the bark in full," by which was meant the decoction and tincture, made tolerably thick, with addition of the powder; and of this mixture, the patient was compelled to take as much in the 24 hours as he could swallow, and frequently more than would remain in the stomach. Such was the practice at St. Bartholomew's Hospital when I was a student; but, of course, it is now relinquished. Diluted sulphuric acid was also given to obviate debility, and sometimes ammonia, opium, aromatic confection, brandy or wine, according to circumstances. Bark, besides its property of resisting the progress of mortification, was thought to communicate strength in proportion to the quantity taken; all these notions about the specific powers of bark are now completely exploded; in fact, so far from communicating strength when given in the enormous quantities to which I have alluded, it often had the contrary effect, for it generally sickened the patient, and produced diarrhoea, effects not likely to promote the strength of an individual.

I should say, gentlemen, that, in the early stage of mortification, while combined with

inflammation, and the sympathetic inflammatory fever, bark is of no use at all. It may, indeed, become useful afterwards, but then it must not be prescribed in the ridiculous manner I have mentioned. Bark is also of no use when mortification is attended with irritative fever, a species of constitutional disturbance which I described in the account of hectic fever, and which is attended with great excitement of the nervous system, subsultus tendinum, and a tendency to delirium, at the same time that the powers of the system are reduced in the extreme. Here you might as well prescribe powder of posts, or common sawdust, as powder of bark under such circumstances; if medicines are of any service, let us rather seek the benefit from those which soothe the local and constitutional irritation. Bark, however, which is improper in the early stage of mortification, and during irritative fever, may become useful in other conditions of the patient, as when the appetite is bad, and the fever rather marked by debility than by excited action, and great nervous perturbation. When properly administered, it may then be beneficial; but, instead of cramming the patient, we should prescribe, in moderation, the lighter preparations of it, especially the sulphate of quinine, or the infusion of cinchona. The sulphate of quinine, in particular, deserves praise, as it agrees with the stomach and bowels, when other preparations of bark cannot be retained. Opium is also one of the most valuable medicines that can be given in mortification; for, it may be administered with great advantage in almost all its stages. In order to obtain much service from it, however, it is not sufficient to give it merely once or twice a day; but you must keep the patient continually under its influence, by administering it to him every four or six hours; beginning with two or three grains in the course of twenty-four hours, and increasing the quantity as the patient becomes habituated to the medicine. These are the right principles, by which the doses of opium should be regulated in cases of mortification. When diarrhoea is present, I need hardly say, that opium will here be a most useful medicine, either alone, or joined with the chalk mixture.

Gentlemen, I have next to consider the *local treatment of mortification* from acute inflammation. Nothing is more obvious than the fact, that it matters very little what is applied to the dead parts themselves, as nothing can have any effect upon them. We have only to take care that the applications may not be such, or so employed, as to do mischief to the neighbouring inflamed living textures. In mortification, many surgeons prefer emollient applications to all others, as for instance, the linseed-meal poultice, and fomentations of poppy-heads, or camomile flowers, which, I may say, are applications in common use in mortification arising from acute inflammation. Some practitioners are partial to the ferment-

ing poultice, which is made by mixing together equal parts of yeast and flour; while others employ finely levigated charcoal in poultices. Charcoal was once supposed to have a specific virtue in resisting putrefaction, and consequently mortification; but this idea is now renounced, and all the virtue, possessed by charcoal, is that of correcting the foetid effluvia. It is sometimes mixed with the linseed-meal poultice; and I know of no objection to it. Camphorated spirits of wine, and the camphor mixture, are used with chloruret of sodium in it, as common applications to mortified parts; so are simple lotions of the chloruret of soda, or lime. With regard to the chlorurets, you must not suffer yourselves to be deceived by the assertions made by some continental surgeons, that they have a specific power in checking the progress of mortification, at least, of common mortification; for, whether or not, they have any peculiar efficacy in checking the advance of hospital gangrene, and gangrenous phagedæna in its diversified forms, is another consideration; but, with respect to their power over common mortification, I cannot find out that they possess all that virtue, which some enthusiastic French surgeons give them the credit of. I acknowledge they have considerable effect in lessening the foetidness of mortified parts; but I think it is going beyond the bounds of truth to assert, that they have any specific power in stopping the progress of the common forms of mortification.

Amongst the applications to mortified parts, I may mention oatmeal made into a poultice with strong beer, and the carrot poultice, made by beating the boiled root into a soft pulp. But the linseed-meal poultice is as frequently used as any other, and if we employ the chlorurets of soda or lime, we may mix the solutions of them with a bread-poultice, or one made of linseed meal. If we were to theorize on the subject, perhaps, we might be induced to suspect, that cold applications would sometimes answer; but this is not the fact; for, if we were to attend to the reports of the best practical surgeons, or consult the feelings of the patient himself, both parties would decide in favour of warm emollient applications. Some French surgeons put so much confidence in the chlorurets or chlorides of soda and lime, that they have preparations of them for internal administration; but all extravagant confidence in remedies of this kind is renounced by the sober practitioners of this country. Indeed I never met with any good surgeon, who placed reliance upon internal specifics for the stoppage of mortification.

Gentlemen, I come, in the next place, to the *second indication* in the treatment of mortification, namely, that of *promoting the separation and removal of the mortified parts*. On this part of the subject no correct judgment can be formed, without a clear comprehension of the nature of the process by which the dead parts are loosened and thrown off

from the living ones. You must understand, then, that the detachment of a slough is a *vital* process, or operation, not explicable on physical principles, or by the laws which influence dead animal matter. When the separation of the dead parts from the living is about to commence, a red line, varying in breadth in different cases, appears at the edges of the living surface, contiguous to the mortified parts. This red line seems to be produced by the adhesive inflammation, established apparently for the purpose of limiting the extent of the sloughing; and here we find another example of the fact I have more than once mentioned to you, that inflammation is often a salutary process. Adhesive inflammation is, in fact, the means, which nature employs to stop the progress of the mortification, and to prepare the living surface for the separation which is about to be produced. By means of it, she forms a kind of barrier between the sphacelated parts and the rest of the body, filling up the cavities of the cellular substance with coagulating lymph, closing the large arteries, and commencing those operations, by which granulations are to be formed, the loss of substance repaired, and the parts healed. Such being the true state of things, we cannot wonder at the solicitude with which surgeons of experience look out for the red line at the margin of a mortified part, or, as it is termed, the *line of separation*.

Gentlemen, soon after the line of separation is formed, you may observe, with a magnifying glass, minute solutions of continuity, little excavated points in its course, which, in a short time, unite, and form a sort of groove or superficial chink between the dead and living parts. This groove encircles and bounds the sphacelated parts; it is, indeed, a true line of separation. Practical surgeons are particularly anxious to discover its formation, because they know that when it makes its appearance, the mortification has stopped and will extend no further, and that the next process will be the production of a much deeper chasm between the dead and the living parts. This furrow, which is at first completely superficial, gradually extends more and more deeply, until it completely undermines the slough, and makes a perfect division between it and the living parts. I have stated, that these changes are the effect of a vital operation; in truth, they are not materially different from those exemplified in the process of common ulceration. In the process by which a slough is loosened and detached, the absorbent system is actively concerned. No doubt, it is by means of the absorbents that the particles, constituting the link between the mortified and living parts, are removed. From the moment that the separation commences by the formation of minute excavations, a discharge takes place from the line of separation; at first it is thin and serous; but, in proportion as the slough loosens, and granulations begin to be produced on the exposed living parts, it gains

more consistence, becomes more plentiful, and exhibits all the characters of healthy pus.

We find, then, gentlemen, that the separation of a slough, or mortified part, from the living body, is a process accomplished entirely by the powers of nature, and, as far as local interference is concerned, the surgeon should not be too officious. Now, although a slough may be cut or scratched without pain or harm to the patient, it cannot be pulled away from its connexions with the living parts, without pain, hæmorrhage, and the greatest risk of a renewal of the mortification. By internal treatment, we may, perhaps, improve the health, and thus expedite the process; but until the slough is entirely loose, until nature has had sufficient time, we cannot safely interfere, by attempting to complete that process, which is quietly to loosen it from the rest of the body, we must not pull or force it away. The utmost we can do is to remove such portion of a considerable slough as may be loosened before the rest of it; for then we are effecting a desirable object, by removing a disagreeable mass, a source of effluvia injurious to the patient's general health. It was formerly the custom to scarify mortified parts; now, if we merely cut the slough, no effect at all can be produced; and if we cut more deeply, we may do harm, by injuring the living parts. There is one exception to this view of the inutility or danger of scarifying, or dividing mortified parts, and that is, when pus is confined under the slough, so as to cause considerable agony to the patient. I attended a case of sloughing of the leg with Professor Green and Mr. Combe, of Caroline-street, in which it was necessary to make frequent incisions through the slough, in order to let out the pus which collected under it; by this means we afforded the patient great relief, yet we took care not to cut so deeply as to injure the living parts.

Gentlemen, it is only when the whole thickness of a limb is mortified, and the circumstances of the case demand amputation, that you can successfully complete the removal of the dead part sooner than nature decrees. I should mention, that, in the early periods of life, and in strong constitutions, all processes in the animal economy go on with expedition. In young individuals, and vigorous constitutions, sloughs are therefore separated more quickly, than in the old and feeble. In fact, the quickness of the process may be said to depend on the youth and strength of the patient; and it is by improving the health, that internal remedies sometimes expedite the operation. When the parts are peculiarly hard and not very vascular, the separation will take place with remarkable slowness, as we see exemplified in the exfoliation of dead portions of bone. I may also remark, that the further parts are from the source of the circulation, the greater time do they generally require for the detachment of their sloughs.

## CLINICAL LECTURE

DELIVERED BY

DR. ELLIOTSON,

AT ST. THOMAS'S HOSPITAL.

SESSION 1832-33.

## LECTURE VII.

*Inflammatory Dropsy—Colic—Colica Pictonum—Scirrhus Pylori et Duodeni—Scirrhus Uteri—Fibrous Tumour of the Uterus.*

GENTLEMEN,

I OMITTED in my last lecture to speak of a case which will be interesting, so far as it will show you how quick we are able, in these days, to cure inflammatory dropsy. It occurred in a boy, sixteen years of age, who had been ill four days, and attributed his complaint to walking about the streets without shoes, about three days previous to the commencement of his disease. On the fourth day his face and scrotum began to swell; anasarca soon extended to his legs, ankles, and feet; at the same time, his abdomen became enlarged, and afforded a sense of fluctuation on percussion. These cases of acute dropsy are generally accompanied with more or less of bronchitis. In this case the breathing became difficult, he had slight cough, and there were the sonorous, sibilous, and crepitous rattles heard in both sides of the chest when he first came in; at that time he had some calomel and jalap given him. The next day, when I saw him, I distinctly heard the rattles; his bowels had been open from the medicine, but the symptoms remained much the same as described. I had him bled to ten ounces, and ordered him two drachms of the supertartrate of potass, with ten grains of jalap, to be given twice a-day; at the same time, the scrotum was punctured in several places. The blood was neither buffed nor cupped; the scrotum lessened in size, without any unpleasant or inflammatory symptom succeeding the punctures. On the 22d, the sibilous and crepitous râles had disappeared; he continued to be well purged by the medicine; the swelling went away, and all the symptoms remaining were weakness, slight dyspnoea, and sonorous rattle in the chest, so that he was advancing very fast towards a cure. A person may have acute inflammatory dropsy, yet the blood may be neither buffed nor cupped. When this boy first came in, his abdomen, scrotum, and legs were very much distended, and, in the course of a few days, he got nearly well, and went away on the 29th of November on his own accord.

*Colic.*—The next case I am going to speak of is one of colic, in Jacob's Ward; there were two cases of colic together in this Ward; the man I am about to speak of, if you recol-

lect, was in the next bed to the other. Many symptoms of course were the same, though the cause of each was very different; consequently my prognosis of one was favourable, but of the other unfavourable. The term colic generally implies pain, which is spasmodic, and arises either from some organic obstruction, or from some poison taken into the system. One of these cases arose from lead, the other arose from some organic disease. The symptoms of colic are pain, contractions of the abdominal muscles, vomiting, and constipation; the pain being relieved by pressure, while that of inflammation is increased; the pain of colic coming on at intervals, whilst the inflammatory always remains constant. The other case of colic arose from lead; the man was a painter, and as soon as the cause was removed, and his bowels got freely opened, the symptoms subsided: he is still staying in the hospital for paralysis of the upper extremities, caused by the same poison. The other case was not produced by any poison or accidental circumstance, but arose from some organic obstruction in part of the intestinal canal. He had a sallow, pale complexion, was not jaundiced, though of a yellow hue, and his skin appeared to hang about his face, so that he was always looking exceedingly ill, and lost flesh. At the time I first saw him I said there was some organic disease, which caused his symptoms; and, on my going round, I always pointed him out, to those who accompanied me, as having some organic obstruction in the alimentary canal; but I never said in what part of it, for it is impossible to say where, unless the pain be confined to some particular spot, or, upon examining the abdomen, you are able to feel some tumour or induration. As this was not the case, of course I could not tell; but if, in any particular part, there is pain, or induration felt, you may then make a pretty fair guess as to the situation of the disease, and the nature of it. There are parts of the intestinal canal more subject to organic disease than any of the rest, that is, the pyloric extremity of the stomach, and the ileo-cæcal portion of the small intestines. Again, we have the cardiac orifice of the stomach, which is liable to this organic or scirrhus disease, and various other parts; we also often find the rectum affected, but here we can always ascertain it by the finger. When the cardiac portion of the stomach is diseased, the symptoms are different from those of the pyloric extremity, there is difficulty in swallowing, and the food after it is swallowed is generally vomited. This man was fifty-five years of age, a letter carrier, who stated, on his admission, that his bowels had been for the last two months in a constipated condition; and if he did not take the purgative medicine every two or three days, had nausea and vomiting, with severe spasmodic contractions of the abdominal muscles. When he came in, he had great pain in the abdomen, for which he was ordered some castor oil, which caused his bowels to be freely

opened: then he became relieved. When the fits come on, he is in violent pain, and the abdominal muscles are drawn in lumps, which is a very common symptom. During the paroxysm, the abdomen loses length, but gains breadth. Having made up my mind, even from the first time I saw him, that there was organic disease, then, with regard to treatment, of course I only attempted to palliate the symptoms, and to do this, I ordered him half a minim of the croton oil every day; this having purged him too much, I diminished it to a quarter of a minim, but this was not sufficient; I therefore ordered it to be repeated every two hours, until his bowels were relieved. From his tendency to constipation, and from the violent return of the spasmodic pains when the least confined in his bowels, he would sometimes have occasion to take it five times a-day, never less than three, but generally to the former quantity, before his bowels were opened, so that he was constantly obliged to take this medicine. I put him upon a nourishing diet, gave him porter, and ordered the croton oil, to lessen his sufferings.

After death, his stomach was found very large, which is usually the case. The pyloric extremity, as well as the duodenum, had become contracted and hardened,—in fact, cartilaginous and constricted; so that the cavity below the stomach and above the duodenum, you perceive, is much smaller than natural; the coats of the stomach are very much thickened. When this part of the alimentary canal becomes obstructed, at what period after food the vomiting will take place is very uncertain; but when the cardiac orifice of the stomach becomes diseased, the vomiting takes place soon after taking any aliment; generally in the course of a few minutes, and seldom exceeding an hour. When the pyloric extremity is diseased, the vomiting will sometimes occur in an hour after taking food, but oftener in a few hours; and sometimes it will only take place once in every three or four days. When the stomach is much distended, especially if the bowels are confined, the vomiting takes place. After death, we invariably find the stomach increased in size. As soon as the contents of this man's bowels became copious, the spasms were produced, and when the bowels had been well emptied, the pains would subside. In spite of frequent purgatives, the accumulation took place, and the spasmodic colic pains were the consequence. On the evening of the day that I saw him he was suddenly seized with an acute attack of pleurisy; had pain in his side, and difficulty of breathing; the pain was increased on each inspiration; and upon examination after death, a large effusion of lymph was found on the right side of the cavity of the pleura. I have no doubt, myself, but that he caught cold from the draft in the ward in which he was placed; for many others I have known suffer from the same cause. My diagnosis in this case was correct, in saying there was some organic ob-

struction that caused his symptoms; but I did not, or could not, tell the exact part that was diseased, unless I had ventured a conjecture, and if I had, I should have said it was either in the pylorus, or near the cœcum; for we generally find the disease exist in the commencement or extremities of different organs. Here is a drawing, you perceive, in Dr. Baillie's work, showing the same disease of the pylorus. The stomach, you see (*showing the plate*), is very much enlarged; the part that is diseased is very much contracted. This plate is an exact representation of the case under consideration.

*Scirrhus Uteri*.—There is another case, which proved fatal, of disease of the womb. A. B., aged 40, had been ill four months before her admission; was attacked first with pain in the back, soon followed by violent flooding. You recollect the case of violent flooding from disease of the womb, which terminated fatally here the other day; the patient had no pain, the flooding was the first symptom; now, in the case under consideration, there was violent pain in the back, succeeded by flooding. In the former case there were fibrous tumours, situated externally to the womb, and a scirrhous substance deposited in the centre of it, which is not very unusual; she had no pain, but after the disease had existed some time, the part began to ulcerate, and it was then, I have no doubt, and I told you so at the time, that she was attacked with flooding; but in the case we have now been examining, which is the true and worst form of scirrhous, the patient was first attacked with pain in the back, the flooding succeeded, and three or four times a day the clots of blood passed from the vagina; she had pain in the left side of the hypogastrium, which was increased by pressure, and I have no doubt but we shall find the disease worse in that part. Upon examination during life, I found the neck and orifice of the uterus indurated, and very tender; the discharge escaping from it was very offensive; there were also some symptoms of disease of the chest; cough, dyspnoea, and an expectoration of a quantity of thick yellow phlegm; respiration was heard on both sides of the chest, but was more distinctly heard on the right. It was a question whether pectoriloquy could be heard or not; I certainly heard imperfect pectoriloquy, and I perceive had the words phthisis and pectoriloquy marked with a query. Of course, with regard to treatment, I could do no more than alleviate the symptoms; I put her upon a nourishing diet, gave her porter and wine; and, to procure her rest and palliate the pain, ordered her half a grain of the muriate of morphia night and morning. The symptoms did not vary much from her admission until death. After taking the morphia for some time, its effects went off, and increased it to one grain. The discharge from the vagina increased, and emaciation continued. Whatever articles of food she wished for, I allowed



her. She was admitted on the 18th of October, and died the 8th of December.

*Autopsy.*—The right side of the uterus, you perceive, is much firmer than the left, and it was on the left side she experienced most pain. Here you can observe (*pointing to the diseased mass*) the same appearance as I was speaking of in the case of the man who died of colic. The neck and mouth of the uterus is scirrhus; this you may call the termination of the uterus, and this is the part in which the disease commenced; and in the man, the cancerous disease was in the smaller part of the intestinal canal. Why the beginning and terminations of organs should be the most liable to this disease I do not know, but it is a curious circumstance.

This disease first began in the neck and mouth of the uterus; ulceration soon commenced, and extended backwards, destroying the parts, becoming what is called a cancerous disease, which is nothing more than the worst form of scirrhus. The parts generally affected are the intestines, the cardiac orifice of the stomach, pylorus, ileo-cæcal portion of the small intestines, and rectum. In the heart we find the disease most frequently affect what may be termed the termination of it, viz., the valves, and the most frequent of them is that which leads from the left ventricle into the aorta, called the aortic valves. The left side of the uterus, where she complained of most pain, is much more eaten away than the right. In these very bad cases of disease of the uterus, the ovaries and surrounding parts are always more or less affected. Here is a large sac, which at present appears to be a disease of the ovary; but I think, upon more minute examination and dissection, it will be found to be a dilatation of the fallopian tube\*. The difference between this case and that of the other woman, who had diseased uterus, is this: the other had no pain, but merely a fibrous substance deposited in the uterus, and the flooding was the first symptom she had of the disease. Besides this she had other external tumours, but they gave her no pain. These substances may be deposited in the uterus for years, without producing any inconvenience. The case I have been speaking of suffered pain from the first, followed by flooding and extensive ulceration: this kind of scirrhus is always a painful disease. The unfortunate patient was forty years of age, a very common period of life for the disease to set in, and it generally occurs in those women who have never borne children, or those who have not, for a long time, been pregnant; but this case differs from both, for she had not long before been delivered.

You recollect I said there was copious expectoration and imperfect pectoriloquy. Laennec says, if the bronchial tubes become di-

lated, and should amount to a cavity, pectoriloquy will be heard. Pectoriloquy can always be heard over the windpipe, and a person may practise this sound, by listening to the trachea of any other individual at the time he is speaking. If the smaller bronchial tubes become dilated and clustered together, imperfect pectoriloquy can be heard; and the smaller bronchial tubes in this case, you perceive, are much dilated and clustered together, having rather a singular appearance. Laennec says, it is common to see one or two of the bronchial tubes dilated; but to have so many together enlarged, as in this instance, is a very rare circumstance. As pectoriloquy can be heard over the trachea, of course, when so many of the smaller tubes are dilated, as in this instance, a cavity is formed and pectoriloquy heard. Cruviellier gives some good illustrations of this scirrhus disease of the pylorus (*showing plate*). The stomach here, you see, is very much enlarged; the pylorus scirrhus, and the canal narrow. This plate I ought to have shown you when speaking of this disease. Here is also a good illustration of disease of the womb (*showing plate*); this fibrous tumour has a very unusual large appearance. It is the same kind of case as I was speaking to you of the other day; the only difference, an ulcer was situated in the upper part of the uterus in the other; and in this you perceive there is no ulcer present. An ulcer in these kinds of tumours is a very unusual circumstance.

## CLINICAL LECTURES

AT THE

MEATH HOSPITAL, OR COUNTY OF  
DUBLIN INFIRMARY,

DELIVERED BY

DR. GRAVES, M.R.I.A.,

*King's Professor of the Institutes of Medi-  
cine in the School of Physic, Dublin.*

(Corrected by himself.)

SESSION 1832-33.

LECTURE III.—PERIOSTITIS.

GENTLEMEN,

I SHALL NOW, enter into the consideration of the special pathology of periostitis. This disease may be divided into two kinds, the diffused and the circumscribed. With the former we have nothing to do, it is never found in the medical wards, and comes properly under the care of the surgeon. It may, however, be well to mention its chief characteristics. By diffused periostitis I mean that form which occupies a large portion of the periosteum, which arises from cold, accident, and other similar

\* Upon examination of this part after lecture, it was found to be a dilatation of the fallopian tube.

caused, which has no connexion with, or dependence on particular states of constitution, or specific diseases, and which frequently terminates in necrosis. The other species, which comes more immediately under the care of the physician, I have termed circumscribed, from its comparatively small extent. Circumscribed periostitis may arise from cold, but, in the majority of instances, its origin may be traced to some specific cause, as mercury, syphilis, or scrofula. It is a much more frequent disease than the former, and presents several varieties. In the first place, it may exist without detachment of the periosteum from the subjacent bone. Here the periosteum becomes inflamed and thickened, while the bone beneath assumes a greater degree of vascularity and consequent increase of size. By this process, which is always comparatively slow, the connexion between these parts is increased, and the tendency of the augmented vascular action is to form depositions. Hence the thickening of the periosteum is sometimes very great, and, in process of time, forms a very considerable circumscribed tumour, which to the touch feels so solid, that it is often mistaken for bone. In this stage of the inflammation, pain and tenderness are complained of in the affected part, and we sometimes find the integuments swollen and discoloured. Matters, however, after some time, assume a more chronic form, and the intensity of the symptoms diminishes, there is little or no tendency to grow larger, and the pain and tenderness undergo a change for the better, though they do not cease altogether. It is at this period, that the periosteum, previously thickened, becomes more dense in its structure, and, in some cases, seems to be almost converted into a fibro-cartilaginous tissue. When this change has been effected, it is doubtful whether the diseased mass is ever again absorbed, though it must be confessed, that swellings, whose history and physical characters strongly indicate their having undergone this change, occasionally disappear altogether in the course of a few months. Many instances will occur in the practice of medicine, where cartilage, or even bone, are absorbed under other circumstances, evincing the value of proper treatment, or the efficacy of unaided nature. To recapitulate; inflammation of the periosteum, attended by deposition and thickening, without effusion of fluid, by increased vascularity of the subjacent bone, and adhesion between it and the periosteum, after remaining for some time, will be found to decrease in the violence of its symptoms, and to assume a fibro-cartilaginous hardness, and in this state it may be absorbed or not. That it may be absorbed we are led to expect from analogy, for we see frequent instances of the absorption of cartilage and bone, but it will be found often to continue for life, and in some instances, to be converted into a true bony node. It is worth your while to consider how the latter process takes place. Ossification commences in the thickened peri-

osteum, and bone is formed, constituting in general a circumscribed bony node which rises from the external surface of subjacent bone. In process of time, the external lamina of the true bone becomes absorbed, and, at the same time, a cancellated structure is developed in the node, which becomes continuous with the cancelli of the bone beneath, and thus there is formed on it a kind of bony arch. We are not able to ascertain at what period this takes place, but you will find instances of this formation in a state of progress in Mr. Howship's account of some specimens in Mr. Heavside's museum, in which he discovered that the external surface of the old bone was not quite absorbed, and that no cancelli were as yet formed. A considerable disfigurement is frequently the consequence, where this affection attacks various parts of the same limb, and you may have observed a man in the chronic wards, in whom the shape of the tibia is lost from this cause. A recurrence of those attacks gives rise to several irregular and partial elevations on the bone, which blunts its edges and fills up its natural concavities, so as to leave scarcely a vestige of its original symmetry, a circumstance which may be frequently observed in the deformed tibia of prostitutes. You observe, gentlemen, in the first stage of this disease, the thickened periosteum presents an uniform density, but, in process of time, a cancellated structure makes its appearance in their deep-seated portion, while, as in the natural shafts of long bones, a layer of firm osseous structure constitutes their surface. It is obvious, therefore, that, in the first stage, there is a distinct line of demarcation between the new and the original structure; while, in the second stage, no such distinct boundary exists, the cancellated portion of both being perfectly identified.

The next form of periostitis is that which is attended with detachment from the subjacent bone, of which there are several varieties. In the first kind you find that, in a space varying from twenty-four hours to eight or ten days, an elevation appears on some part of a bone, with pain and tenderness on pressure, and forming a hard tumour, giving to the touch the feeling of a solid substance. This error may be detected by a more accurate examination, and there will be some elasticity discovered in the swelling. The cause of its seeming to be a solid tumour arises from the manner in which the periosteum is tensely stretched over the effused fluid. In the second stage of this variety, there is a gradual diminution of the pain and swelling; the fluid, which was effused under the periosteum, is absorbed, and the subjacent bone and periosteum become again united. This process generally occupies some time; but there are instances where its accomplishment is more speedy. Of this nature are the tumours which arise and disappear with such rapidity on the scalp and elsewhere, which yield quickly to leeches and blistering, and after existing for some weeks,

or, perhaps, even days, vanish, and leave no sensible trace behind. A case of this kind on the scalp, appearing and receding in a few days, has been lately mentioned to me by Mr. Crampton. The pathological distinction of these tumours consists in this: that the surface of the subjacent bone does not die, and, consequently, the process of reparation is short; for when the effused matter is absorbed, there is nothing to prevent the adhesion of the bone and periosteum.

The variety just described is not attended necessarily with ulceration of the skin; but there is another kind, in which effusion, as just described, takes place, accompanied by increased vascularity on the surface of the bone beneath. The matter effused at length escapes through an opening, made by ulceration in the integuments, and nature effects a cure by means of granulations, arising from the vascular surface of the bone, which, uniting with granulations from the periosteum and integuments, repairs the breach of substance, and produces consolidation of the separated parts.

In the next variety, matter is effused beneath the periosteum, and the bone of the affected portion becomes vascular at a little depth, while the surface is white and dead, consisting of a thin, worm-eaten, cribriform lamina, which, after some time, separates, and opens for itself a passage through the integuments. This exfoliation is followed by a growth of granulations from the vascular bone beneath, and the process of healing is perfected in the manner before described. In some instances the dead lamina is not thrown off at once, but undergoes a very curious process, being perforated, and as if worm-eaten, and thus allowing the granulations thrown out by the healthy bone to pass through its structure until the whole of the disorganized plate is removed. Such are the chief varieties of periostitis, exclusive of that species which is observed in scrofula, and which, from the disease simultaneously affecting the bones and periosteum, can scarcely be called periostitis. In some vitiated and cachectic constitutions the periosteum becomes affected, in consequence of ulceration commencing in the skin from rupia, boils, or ethyria; this, however, I shall not enter into at present. With respect to the derangement which takes place in the skin, it always bears proportion to the internal ulceration, and in the first species mentioned there is scarcely any. In the other kinds, it is of great use at the commencement to cut down to the bone through the integuments and periosteum, as recommended by Mr. Crampton; for this practice, by lessening the inflammation, limits the quantity of bone which is about to die, and consequently the extent of integument likely to be removed by ulceration.

When we come to consider periostitis, and investigate its causes, we find that it frequently arises from specific poisons, as scrofula, mercury, or syphilis. You have many opportunities, in the surgical wards, of becoming ac-

quainted with the characteristic marks of that form which owes its existence to scrofula; it is generally milder in its symptoms; there is less pain and tenderness; the swelling is less; and it is most commonly observed in young persons, in whom we cannot suspect the operation of syphilitic or mercurial causes. I do not, however, mean to say, that you will not find the latter causes combined with scrofula, even in very young persons; but such an occurrence is rare. But where this disease occurs at later periods of life, you are sometimes puzzled to decide whether it is a consequence of syphilis, or whether it is superinduced by mercury. When called to a case of this kind, inquire accurately into its history, and if you find that the person has taken mercury for the cure of primary or secondary symptoms, that it cured the disease, and the cure was decided; that in a week, a fortnight, or a month after this the patient was exposed to cold; that a great number of spots are simultaneously affected, and in corresponding parts of the limb,—you will be led to conclude, that the disease is mercurial periostitis. About a week ago, a young gentleman called on me with several periostitic swellings on his bones. I said to him, "You were taking mercury within the last six weeks." He said he was. "You then went out and got cold." He said he had; and in this way I extracted from him the history of his complaint, and guessed it with such accuracy, that he stared at me as if I had a hundred heads. Such a case as this, gentlemen, arises from cold affecting the constitution, while under the influence of mercury. But there is still a more perplexing one; you may have mercurial periostitis mixed up with venereal symptoms. This is no uncommon thing among persons advanced in life, who have had frequent attacks of venereal, and undergone repeated courses of mercury. You have the two diseases blended in a very complicated form, and then indeed are we placed between Scylla and Charybdis, mercurial action producing a cachectic state of constitution, and venereal a diseased state of certain parts. Moreover, you are all aware every thing that impairs the constitution has a tendency to bring on scrofula. Now, take a person who is suffering from syphilis; deprive him, as you often must (from the confinement a mercurial course requires), of pure open air, keep him on low diet, and what is the consequence? To the syphilis and mercurial cachexy, you have scrofula frequently superadded, and that hideous combination of disease which we sometimes meet with at the present day, but fortunately not so often as formerly. Some years ago, all such cases were mercurialized—often to death. In the wards of the Lock Hospital in this city, the progress of the patient towards cure was calculated in proportion to the number of pints he spit during the day. In the skulls of persons who lived during the last century, preserved at Leyden, the destruction of the bony tissue is extraordinary; indeed a phrenologist

would be often puzzled by the havoc made by disease among the organs of our forefathers. An old writer, I think it is Herodotus or Xenophon, says, that the skulls of the Egyptians, lying on a field of battle, could be recognised by their hardness. Those of the last century, it seems, we can distinguish by their softness. This is no longer the case; longevity, in the present century, is remarkably increased; and I think there are some countries which will be considerably raised in the scale of population from the improvements introduced in the treatment of venereal; for this we are chiefly indebted to English surgeons and physicians. Much credit is due to Sir Thomas Moriarty, Mr. Mathias, Mr. Rose, and other army surgeons, who were the first in pointing out the baneful effects of excessive courses of mercury. Dr. Thomson of Edinburgh has also done a great deal in promoting our knowledge on this point. It is but justice to mention, while speaking on this subject, the valuable and important services of our fellow townsman, Mr. Carmichael. When he first published his observations on the treatment of venereal disease, his opinions were looked upon as merely theoretical by most of the surgical profession here, and his practice industriously derided. I do not go so far as to admit all that Mr. Carmichael has advanced; but it is from him we have received abundant proofs, that many cases of syphilis can be cured without mercury, and this is highly important. To the knowledge of this fact, to the more judicious employment of mercury, to the introduction of vaccination by Jenner, at the beginning of the last century, and to the general improvement, not only in diet, but also in medical and surgical treatment, we are to attribute the increased longevity of the present period. Human life had almost doubled, and we began to hope, that in 1900, it might be quadrupled. The mortality in London decreased in the proportion of 15 per cent, and the profits of Insurance Companies declined. In Dr. Hawkin's book, which was published in 1829, you will find that he strongly expressed his gratification and delight at the cheering prospect which lay before us; and we were all ready to sympathize in his anticipations, when, unfortunately, the cholera came, and brought us back to our original position. But to return to our subject. It is unnecessary for me to bring proofs in support of the opinion, that mercury alone brings on diseases of the bones. You are aware of the case of a man named William Byrne, in this Hospital, who got mercury for disease of the liver, and returned in a fortnight after he was discharged with periostitis. Dr. Lendrick had a case of poisoning by corrosive sublimate some time ago. The stomach pump, and white of egg, succeeded in saving the man's life, but he got a severe attack of periostitis.

I shall now detain you for a short time in speaking of the treatment of periostitis. As to the local means, you will find much good from leeching, and blisters dressed with savine

ointment, particularly when the disease is recent, and the inflammation circumscribed. If the blisters produce but little effect, try the tartar emetic ointment; I have found it useful where blistering failed. In obstinate cases, Mr. Crampton's plan of cutting down to the bone is excellent, and you should have recourse to it. When a periosteal node breaks and matter is discharged, and you observe the bottom of the sore covered with pale unhealthy granulations, or a piece of diseased bone lying in it which ought to be detached, introduce a stick of nitrate of silver, and touch, not the whole, but some given part of the surface every day, and you will produce a rapid improvement in its appearance. This treatment was introduced by Mr. Nichol, and you will find a detail of it in the Edinburgh Medical and Surgical Journal deserving your attentive perusal. As to the general treatment of periostitis, where the constitution is strong, and there is no objection to the use of mercury, this remedy affords the most certain and speedy relief, having premised venesection and leeching. Even when the disease arises after a course of mercury, or in consequence of syphilis, where its symptoms are violent and the constitution is strong, the rapid injection of mercury is the best treatment you can adopt. This is particularly suited to that painful species of cranial periostitis which I have described, and which scarcely yields to any other remedy, and also to those cases where the disease attacks the shaft of the femur. In both of these affections the mercurialization, to be effectual, must be carried to decided salivation, and must be continued for three or four days after the mouth becomes sore, though you will meet some cases which yield before salivation. This, however, is an uncommon occurrence. Where the symptoms are less violent we may content ourselves with Plummer's pill or blue pill, in alterative doses. In persons of delicate habit, who are much worn out by disease, and where all other means fail, corrosive sublimate sometimes succeeds, or De Verno's vegetable syrup. The latter acts on the constitution in a mild and beneficial manner, and I have seen many persons restored to health by its agency. We must never forget, however, that there is a material objection to the use of mercury in hospitals among the poor; for, on returning home, they are almost invariably exposed to fatigue and cold, have consequently a strong liability to relapses, and are then of course worse than before. This unfortunate occurrence may be generally avoided among the wealthy, and to them the mercurial cure is therefore more applicable. Besides mercury, the most effectual remedies are colchicum and tartar emetic. You will find, that after bleeding or leeching, by employing colchicum with narcotics, as for instance, the wine or tincture of the seeds of colchicum with Battley's sedative liquor, or black drop, combined with magnesia, you will produce a very powerful effect. You are aware of the power which

colchicum produces in subduing inflammatory affections of the heart, and also of the joints, and it must be looked on as a very valuable remedy. You have, in addition to this, the different antimonial preparations. The antimonial wine and James's powder will be particularly serviceable. You cannot combine colchicum with antimonials, in consequence of their effect on the stomach, but you can combine either of them with narcotics. During the whole course of the disease you must employ narcotics; they relieve pain, and are to be used plentifully, but with discrimination. When the disease becomes chronic, gives sarsaparilla with nitric acid. The latter enhances the value of the sarsaparilla, though we are unacquainted with its *modus operandi*. You have, therefore, gentlemen, three modes of treatment, first the mercurial, which, where it is admissible, is the most speedy and effectual; next, the antiphlogistic, consisting of bleeding, leeches, colchicum, antimonials, and narcotics; and thirdly, the chronic treatment, which comprises sarsaparilla and nitric acid with narcotics, change of air, and time.

Gentlemen, I understand that a man above stairs, who was affected with hæmoptysis, died this morning. You will be surprised, perhaps, at his death, as the spitting of blood had stopped. This, which I think I can explain to you, and some observations on the pathology and treatment of hæmoptysis, will form the subject of our next lecture.

THE

## ANATOMICAL EXERCITATIONS

OF

WILLIAM HARVEY, M.D.

*(Concluded from p. 260.)*

## CONCLUSIONS.

WHENCE it happens that it is lengthened and contracted, at one time more and at another less frequently, according as they seem more panting and to need more air; but of this in the treatise of respiration. It is also manifest, that the auricles pulsate and contract themselves, as I said before, and force the blood into the ventricles, whence it is, that wherever there is a ventricle, there an auricle is necessary, not only (as is commonly believed) that it may be the receptacle and cellar of blood (for what need is there for a pulsation for the retaining of it), but the first movers of the blood are the auricles, especially the right, being the first thing that lives and the last that dies, as it has been said before; and, on that account, are necessary, that is to say, the blood, already yielding, may be poured into the ventricle. Which ventricle, in continuation, (by contracting itself,) emits more conveniently and propels more violently the blood, being already

in motion; as when at play with a ball, being struck, it is impelled from a bound stronger and farther than by simply throwing it. Moreover, contrary to the vulgar opinion, because neither the heart, nor any thing else, can distend itself, as to attract any thing in its diastole (unless, in its return to its former state, like a sponge, being first compressed with force), but it is certain, that all local motion happens and takes its beginning first from the contraction of some part; therefore, by the contraction of the auricles the blood is forced into the ventricles, as I made to appear before, and it is propelled and transferred from thence by a contraction of the ventricles.

Which is truth concerning local motion, and that the immediate motive organ (in all creatures in whom a motive spirit is necessary) is contractible, as Aristotle says, in his *Book de Spiritu*, and elsewhere, and that Aristotle knew the muscles, and was not wrong to have referred all motion in creatures to the nerves, or contractility; and, therefore, he called those tendons in the heart nerves. I hope it will be made clear, if, at any time, I shall have leisure to demonstrate concerning the motive organs in animals, and the fabric of the muscles, from my own observations.

But pursuing our purpose, concerning the use of the auricles, for filling the ventricles with blood, as it has been already shown; it is to be noted, that by how much more dense and compact the heart is, and by how much more thick the walls of it are, by so much the more nervous and muscular the auricles are to draw in and fill it in those in whom it is otherwise. It appears in these as a bladder of blood, or a membrane containing blood, as in fishes, for there the bladder, which is in the place of the auricle, is very thin, and so large that the heart seems to float above it; but in those fishes, in which the bladder is a little more fleshy, it seems precisely to imitate and counterfeit the lungs, as in the barbel, tench, and others.

In some men, that is to say such as are brawny, and of firmer habit of body, I have found the right auricle so strong, and so neatly made up within, by the various texture of fibres, that it seemed equal in strength to the ventricles of other men; and truly I wondered, that in divers men there should be such a difference. But it is to be observed, that the auricles are much larger in the fœtus in proportion, because, before the heart is made, or performs its functions (as shown before), they perform the office of the heart. But the things I have observed in the formation of the fœtus, and have mentioned before (and Aristotle confirms by an egg), bring great faith and light to this thing. In the meantime, whilst the fœtus is as it were a tender worm, and, as it is said, is in the amniotic fluid, a point of blood only exists, or a bladder pulsating, and as it were a portion of the umbilical vein: afterwards, when the fœtus being shaped, begins to have a stronger corpulency, this little bag becoming more fleshy and robust (changing

its constitution), it turns into auricles, above which the body of the heart begins to grow, as yet executing no particular office; the bones being already formed, and the bones already distinct from the flesh, it is a perfect animal, and is perceived to have motion: then the heart also is perceived to have in it pulsation, and, as I have said, transfuses the blood out of the vena cava through both ventricles into the arteries. So nature being perfect and divine, making nothing in vain, neither gave a heart to any where it was not wanted, nor made it before there was need of one; but proceeding by the same degrees in the formation of every animal (as, for instance, the egg, worm, and fetus), it acquires its perfection in each. But these things are to be confirmed elsewhere, by many observations in the formation of the fetus.

Lastly; Hippocrates, in his Book on the Heart (not without reason), called it a muscle, seeing the action and function of each were the same, namely, to contract itself, and to move something else, to wit, the contained blood.

Moreover, from the constitution of the fibres, and their motive structure, as in the muscles themselves, we may perceive the use and action of the heart. All anatomists have observed, with Galen, that the body of the heart is constructed of fibres running in various directions, that is to say, straight, transverse, and oblique. But, in a boiled heart, the structure of the fibres is found to be otherwise. For all the fibres in the walls and septum are circular, as in a sphincter; but those which are in the tendons being stretched out at length, are oblique; so it comes to pass, that, when all these fibres are contracted together, it happens that the apex and base are brought together by the tendons, and the septum is enclosed in a circle: also the heart is contracted every way, and the ventricles strengthened. Therefore, since the action of it is contraction, we must conclude, that the function of it is to force blood into the arteries.

Nor must we disagree with Aristotle concerning the principality of the heart, that it does not receive motion and sensation from the brain, nor blood from the liver, but that it is the beginning of the veins, and of the blood, and the like. Seeing those that endeavour to confute him omit that chief argument (or they do not understand), namely, that the heart is the first thing existent, and that it has, in itself, blood, life, sensation, and motion, before either the brain or liver were made, or appeared perfectly distinct, or, at least, were able to perform any function. And by these proper organs relating to motion, the heart, as if some internal animal, lives a long time. Which thing being done first, nature wishes the whole animal creature afterwards to be made, nourished, preserved, and perfected, as its own work and dwelling-place.

The heart is, as it were, a prince in the commonwealth, in whose power is the first

and highest command of governing; from which, as from the beginning and foundation, all power in the animal is derived and depends.

But besides, very many things concerning the arteries also illustrate and confirm this truth. When it is considered why the arteria venosa does not pulsate, since it is numbered amongst the arteries, or why there is a pulsation found in the venæ arteriosa, because the pulse is the impulsion of the blood of the arteries; or why do the arteries, in the thickness and strength of their tunics, differ so much from the veins, because they bear the force of the action of the heart and the breaking forth of the blood? Hence, since nature, who is perfect, makes nothing in vain, and is sufficient in all things, by so much the nearer the arteries are to the heart, by so much more they differ from the veins in their construction, and are more robust and more ligamentous; but in the farthest distribution of them, as in the hand foot, brain, mesentery, and spermatic vessels, they are so like, in their construction, that closely viewing their tunics, it is difficult to determine one from the other; and this is so for just reasons; for the farther the arteries are from the heart, with so much less strength a great deal are they struck, the impulse of the heart being weakened by the great distance. Add to this, that the impulse of the heart, since it must needs be sufficient in all the trunks and branches of the arteries, it is lessened or diminished at every division so much so, that the last divisions of arterial capillaries seem to be veins, not only in construction, but in function, as they do not give a perceptible pulse, or perhaps none at all, or not at all times, unless the heart beats more violently, or some small artery is more dilated or more open in some parts.

Hence it happens we sometimes find a pulse in the teeth, at other times in the gums, at other times in the fingers; sometimes we cannot distinguish this. I have certainly observed that boys, whose circulation is always frequent, were plainly in a fever by this one sign; so likewise in tender and delicate people, by grasping their fingers I could easily perceive, by the pulsation of their fingers, when the fever was in its strength. On the other hand, when the heart beats faintly, the pulse cannot be felt either in the fingers, wrist, temples, as in fainting, hysteria, debility, and people in dying circumstances.

Here surgeons are to be admonished, lest they be deceived; because, in cutting off limbs, excision of tumours, and in wounds, the blood, indeed, comes forcibly out of the artery, but not always by jerks; and that the small arteries do not pulsate, especially if they are tied with a ligature. Besides, the vena arteriosa has not only the construction and tunic of an artery, but it does not differ so much in the thickness of the tunic from the veins as the aorta. The reason is, because the aorta bears a greater force of blood from the left ventricle

than that does from the right, therefore it has the construction of the tunics just so much softer than the aorta, as the right ventricle of the heart is weaker than the left; and as much as the structure and softness of the lungs abates from the habit of body and flesh, just so much the tunics of the vena arteriosa differ from that of the aorta.

And all these things every where keep the same proportion, for the more brawny, muscular, and the denser habit of body men are, and the stronger, thicker, and more fibrous heart they have, so much the more suitable.

Auricles and arteries they have, both in proportion to thickness and strength. Hence in those animals whose ventricles are smooth within, the septa and valves thin, as in fishes, birds, serpents, and very many more kinds of animals, in these the arteries differ very little or nothing from the thickness of the veins.

Besides, the lungs have such large vessels, both veins and arteries, that the trunk of the arteria venosa exceeds both the crural and jugular branches as (by experience and autopsy, nor was I deceived in the inspection of those things which I saw in dissected animals) that on wounding them all the blood in them has run out, because the fountain, cellar, and treasury of blood, and storehouse of its perfection, are in the heart and lungs. Why also do we see, in anatomical dissection, that the left ventricle and arteria venosa abounds with so great a quantity of blood, and indeed of the same colour and consistence, with that of the right ventricle and vena arteriosa, alike black and clotted? Because the blood passes hither from thence continually through the lungs.

Lastly, why is the vein commonly called vena arteriosa? it has the construction of an artery, the arteria venosa that of a vein. Because, in truth, it is in function and construction, and in all things, artery; the latter a vein, contrary to the common opinion. And why has the vena arteriosa so large an orifice? Because it carries more blood to the lungs than is necessary to nourish them.

All these phenomena are to be observed in dissections, and very many more, if they are properly weighed, seem to illustrate the above truth abundantly, and, indeed, to confirm it, at the same time to be adverse to the common opinion. As it is very difficult for any one to demonstrate, unless as we have done, for what cause all these things have been so constituted and formed.

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## ON THE FUNCTIONS

OF THE

### UNIMPREGNATED UTERUS.

(Continued from page 592.)

In what we have further to state on the subject of our present inquiry, we have almost

exclusively to depend on the calculations of Mr. Finlaison. The reader has already seen that according to the observations of that gentleman, the period of cessation of the menses is not loaded with any marked excess of mortality. "This advantage in favour of female life," he remarks, "is first most evident about fourteen, after which the mortality in the female sex is observed to proceed onwards to the age of fifty-five with the slightest imaginable increase." For so many of the results of Mr. Finlaison's operations, as are applicable to the crisis which is supposed to take place in the female constitution at the commencement of its decline, the author is indebted to the personal favour of that gentleman himself. The following calculations of the rate of mortality of the government annuitants are made on a scale of 100,000 lives of members of both sexes and of all ages. The results, which are especially illustrative of the immediately current part of our inquiry, are distributed into three epochs of five years each, inclusive of the median line of life in both sexes, and in the female of the period of cessation of the menses. During each of these epochs, the rates of mortality of each sex are given as follows in their respective progressions. Out of 100,000 members alive of all ages, there will die in the five years after the age of 35, i.e. between the ages of 35 and 40, the latter inclusive, of males 7,042, and of females 5,738; in the five years after 40, i.e. between the ages of 40 and 45, the latter inclusive, there will die, of males 6,959, and of females 6,889; and after the age of 45, i.e. between the years of 45 and 50, the latter inclusive, there will die of males, 10,381, and of females 7,714.

The reader will please to observe, that in each of these several periods, there is a positive excess of deaths of males over those of females; but that in the middle series, viz. that between 40 and 45, which in the female includes within its extremes some few cases of early retirement of the catamenial function, but in the majority, the period of dodging preparation for the final cessation of the menses, the excess in question is much less than in either of the other two series. Of the correctness of these calculations, as applied to a class of select lives, there can be no doubt, as there is no room for error. But the author cannot properly dismiss the subject without adverting to certain other calculations very recently published at Brussels, by Messrs. Quetelet and Sinitz, in a pamphlet entitled *Recherches sur la Reproduction et la Mortalité de l'Homme aux différens Ages et sur la Population de la Belgique*, 1832. A government order was issued, in 1828, for a census of the entire population of Belgium, with directions that it should include returns of all the births, deaths, marriages, and changes of residence of the people during every year, and accompanied by an intimation that a similar assessment would be ordered for every ten years. The order for the first census was carried into effect towards

the end of the year 1829. It is a peculiarity of this assessment that it has furnished distinct tables of results on all the points which it was charged to report upon for two classes of population, viz. for residents of towns and for those of country districts. Now it happens that, on these separate returns for the towns and for the country districts, its reports of the mortality of the different sexes exhibit a most extraordinary discrepancy with all former results on subjects of this kind. In Messrs. Quetelet's and Smits' returns of the country mortality, the female deaths present an excess over those of the males during the three series of years corresponding with those just quoted from Mr. Finlaison's reports, in the proportion of something more than 24 to 18. Making 100,000, as in Mr. Finlaison's calculations, the numerical basis of their operations, the comparative mortality of the two sexes for the country districts of Belgium, as given by Messrs. Quetelet and Smits, are as follows, viz., out of 100,000 persons of both sexes alive, the rates of deaths within the five years between the ages of 35 and 40, the latter inclusive, are, of males 4,681, and of females 8,071; in the five years between the ages of 40 and 45, the latter inclusive, of males 5,975, and of females 8,536; and in the five years between the ages of 45 and 50, the latter inclusive, of males 7,692, and of females 8,056. Thus we see represented a most remarkable excess of female mortality in the country districts of Belgium; whereas in all the towns of the Netherlands, the returns would seem to correspond, at least in principle, with what has hitherto been considered in the light almost of a general law of mortality. Accordingly, out of 100,000 inhabitants of the towns of Belgium, the rates of deaths in five years after the age of 35, that is, between the ages of 35 and 40, the latter inclusive, of males 7,189, and of females 7,679; between the ages of 40 and 45, the latter inclusive, of males 8,894, and of females 7,153; and between the ages of 45 and 50, the latter inclusive, of males 8,678, and of females 8,062; giving a total of mortality for the three series of years together, of 24,761 males and 22,894 females. But the excess of the mortality in some particular towns of Belgium very greatly surmounts the average results of Messrs. Quetelet and Smits. The author is indebted to the further kindness of Mr. Finlaison for the following quotation from a table of the average mortality of Ostend, constructed from the best possible materials by that gentleman himself, whilst recently residing temporarily in that town. For the convenience of an accurate comparison with the results of the foregoing calculations, the operation is given on the same numerical scale of 100,000 lives. With that understanding, the rates relatively of the male and female mortality at Ostend, during the tract of years intermediate between the ages of 35 and 50, as made out by Mr. Finlaison, and believed by him to be scarcely

liable to the possibility of error, is as follows: Out of 100,000 souls of both sexes and of all ages, the rates of deaths after 35 years of age, that is, between the ages of 35 and 40, the latter inclusive, are, of males 8,041, and of females 6,665; between the ages of 40 and 45, the latter inclusive, of males 11,107, and of females 7,094; and between the ages of 45 and 50, the latter inclusive, of males 13,079, and of females 8,188. From these results it follows, that the difference in the value of life in Ostend against the male and in favour of the female, at a period of life, inclusive in both sexes of the commencement of its decline, and in the female of the cessation of the menses, is in the very remarkable proportion of 32 to 21.

Before concluding this part of his subject, the author thinks it right to call his reader's attention to some statements and references of M. Desormeaux, in general confirmation of the same views with his own; but without being able to give an opinion as to the amount of value of the documentary evidence, the existence rather than the precise facts of which he quotes. "The epoch of the cessation of the menses, commonly called the critical age, is ordinarily considered as a period of great danger to the sex. For a long time past, however, some of our ablest practitioners have considered the fears entertained on this subject as exaggerated and unfounded, and have believed that this retirement of the function is a natural phenomena ordinarily exempt from accidents; that in the cases of many women, and especially in the instances of women of feeble constitutions, whose menstrual evacuations had been too abundant and in apparent disproportion to their strength, it is even an earnest of the commencement of better health. Learned men, who have sought to establish laws of mortality for different periods of life, have found nothing among the sequels of death indicative of the ravages of the critical period. Muret, in a work on the population of the Pays de Vaud, observes: 'My observations have not taught me that the age of from 40 to 50 is more critical for women than that of from 10 to 20.' M. Benoiston de Chateaufort has taken up these researches, and presented the result of them in a memoir which was read to the Academy of Sciences, in 1818, 'On the Mortality of Women of the Age of between forty and fifty.'" This essay did not appear in the Transactions of the Institute for the year 1818. "This result is indeed so important," observes M. Desormeaux, "that I shall here transcribe its principal facts. 'From the forty-third to the sixtieth degree of north latitude, along a line extending from Marseilles to St. Petersburg, passing by Vevey, Paris, Berlin, and Stockholm, it is a fact, that at no epoch of female life, from the thirtieth to the sixtieth year, are we able to discover any increase in the mortality of women beyond what should be attributed to the natural progress of age; whereas, at all epochs of male life, from the age of thirty to



that of seventy, we observe a greater rate of mortality of the male than of the female sex. This excess is most remarkable between the ages of forty and fifty. It results from these new observations, that the age of from forty to fifty is more truly critical for men than for women; and that seems to be the fact whatever be the kind of life they lead, and whether they live in society or in retirement, whether in the camp or in the cloister. Inasmuch, however, as it cannot be denied that a certain number of women die between the ages of forty and fifty, in consequence of the revolution which takes place in their constitution at that period, a cause of mortality which does not exist in the other sex, what would be their decrement of numbers, already actually inferior to that of the male sex during the same period, and what might be expected to be the strength and duration of their lives, did they possess the additional privilege of not being subject to this law?" From the whole of the above observations, the author thinks that he can safely invite his reader to the conclusion, that the period of cessation of the menses, in the human female, cannot be considered on the average as unsalutary to her constitution; or, if in a few cases, it be productive of effects dangerous to health, or fatal to life, that, in a great majority of cases, it must have a salutary influence, and is made protective of the sex against the invasion probably of a number of diseases to which it might otherwise be liable. The discrepancies of Messrs. Quetelet's and Smits' country returns with the results of all other published assessments, must be left to be determined by future observations.

From the general conclusion now come to, we are, however, not to suppose that the function of menstruation is not occasionally liable to great irregularities, which sometimes are causes, and at other times effects and accompaniments, of other maladies. The author, indeed, believes that disordered menstruation is much more frequently the effect than it is the cause of other diseases. Disordered menstruation is accordingly very frequently associated with obvious indications of the presence of morbid states of the general system, and of parts of the uterine system not immediately concerned in the performance of the catamenial function. But not only are diseased conditions of distant organs and of remote functional actions, competent to embarrass and, in many cases, to interrupt the due performance of this characteristic function of the human female, but almost all considerable influences, incident to the actions of life, and especially such as are productive of violent and morbid effects upon the nervous and sanguiferous systems, are capable of exerting the same power. When, therefore, the cessation of the menses happens to be complicated, or speedily succeeded by symptoms indicative of diseased structures, or of unusually morbid actions, we are generally competent, after the death of such subjects, to discover causes abundantly sufficient to account

for it, independently of any influence incident to the contemporaneous retirement of the catamenial function. There are, indeed, few diseases of any considerable importance or duration which may not affect or be affected by the operations of this function. High-toned fevers, accompanied by more than ordinary excitement of the heart and arteries, are often greatly alleviated by its accession; whilst, however, others of a low type, or such as by long protraction have brought the patient into a state of much exhaustion and debility, are usually greatly exasperated, or rendered mortal by an uterine discharge, even though it should appear in a very moderate quantity. The re-establishment of the catamenial function, after a temporary suspension of its periods, accompanied by lesions and disturbances of other functions, usually operates as a remedy of the attendant symptoms, and especially amongst others of plethoric vascular congestions and vicarious hæmorrhagic discharges. It is an aphoristic observation of Hippocrates, that "the restoration of suppressed menses is a cure for hæmoptysis;" that special variety of the disease, no doubt, which we sometimes encounter as one of the most formidable among the effects of suppression of the catamenia. Experience, moreover, proves that the restoration of the function, by restoring the healthy balance of the circulation, exerts a similar remedial influence in many other examples of congestive overfulness of the sanguiferous system.

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## CLINICAL LECTURES

DELIVERED

AT THE MIDDLESEX HOSPITAL,

BY

SIR CHARLES BELL, K.G.H.,

*Professor of Anatomy and Surgery to the Royal College of Surgeons, London, &c., &c.*

DELIVERED DEC. 7, 1832.

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FRACTURE OF THE PATELLA—OF THE CERVIX FEMORIS—INJURIES OF THE HIP-JOINT.

GENTLEMEN,

This is an accident of great importance. A young man, of the name of Gregory, while stepping out of a shop, slipped, and while endeavouring to recover himself, says he heard something snap. He became lame, and when he tried to walk, his legs sunk under him. This accident is ten times worse than a fracture of the femur, or of the tibia, because if either of these bones are broken, they unite as firmly as ever; but the patella does not: it does not unite by bone, but by ligament; and it is a singular fact, that if a man has broken one patella, the other is very liable to the same accident. This circumstance has given rise to many speculations; it is thought

by some, that the bones of the person who sustains this accident are more brittle than usual, or that there is some peculiar structure in the formation of the bones. This is not the case; for the first fracture occurs from accident, and the second is the consequence of the first; for when a man has broken one patella, that leg is rendered weaker than the other. If he slips, in attempting to recover himself with the other leg, the whole mass of muscles on the fore part of the thigh is put in action (you must bear in mind, the accident does not occur when the limb is bent under the man, but at a certain degree of extension); and the bone is snapped across, as you would a stick across your knee. You know inflammation is necessary to the union of fracture by ossification. Coagulating lymph is first thrown out; this is by degrees converted into a consolidated mass, which becomes firm and unyielding, and sustains the fractured pieces of bone. This is not the case in fracture of the patella; there is merely an increased secretion of the synovia; you have no injury of the surrounding parts—no laceration—no extravasation; consequently, the essential circumstances necessary to the union of the bone by ossific matter are wanting. The practice is, not to endeavour to unite the bone by ligament; and however you may despair of effecting your object, your practice must be directed to obtain union by bone. The first indication is to apply cold lotions and leeches, and relax the rectus and all the quadriceps muscles; by doing this, you allow the upper fractured end of the bone to descend. When you have subdued the inflammation, you take a bandage and apply one end above the joint, the other below it: by this means you bring the broken ends together; and if you do not succeed in your object of getting union by bone, you have the shortest and strongest possible ligament.

The principle I am now going to explain is very important for you to know. When the bone is torn across by the force of the muscles, very little inflammation arises; but the case is altogether different when broken by the kick of a horse, or a blow in any other way. Here you have tumefaction, inflammation, laceration, &c.

A coachman was brought into this hospital with a broken patella, produced by a blow. The gentleman in attendance, judging from other cases of fractured patella, of which we had six in the hospital at that time, all produced by the action of the muscles, and not being aware of this principle, applied a bandage; this, in twenty-four hours, produced such a degree of inflammation in the joint, that no after treatment could subdue it. Suppuration followed, and the man died. This person was the servant of a family who held him in great estimation, and I have (because my name was over the bed of the poor man) for ever lost the good opinion of that family; but this, gentlemen, is not to be taken into consideration, when the life of a fellow-creature was sacrificed from a want of knowledge of this

principle. When the patella is broken across by a blow, the periosteum is injured; it is attended with inflammation and tumefaction, and you have ossific union. This will lead us to a consideration of fracture of the neck of the thigh bone.

Jaue —, an old woman, aged 73, says she was thrown down by two drunken women, and fell upon her hip. She was brought into this hospital with the neck of the thigh bone broken. She has been in the house two months, and is now free from any danger arising from the fever which is always attendant on the accident. There are three ways in which the neck of the femur may fracture;—in old age the bones acquire considerable brittleness; an old lady, walking across the room, trips upon a carpet, falls upon her hip, and dies from the injury. If you examine after death, you will find the neck of the bone and trochanter major broken like a tea-cup. If a person falls with his foot in a hole, or jumps out of a window, the neck of the bone is broken off in the joint. In this case, union will not take place, for it is broken off internally to the capsule, and that which is necessary to the union, namely, inflammation, is wanting. Now, sometimes the parts are broken off like a wedge, and the bone is split down. Here you have a common fracture with consolidation and re-union; so you have one fracture where the blow is on the trochanter major, another where the bone is broken off within the capsule, and a third external to the capsule, resembling a common fracture. In your diagnosis, you notice, first, age and sex.

— Tobin came into this hospital with injury of the hip, his leg apparently shortened, but (this is important) *his toe turned inwards*. His being a man was certainly not in favour of fracture. It is much more frequent in old than in young people, and in old women than in old men. He is a young person, where you would look for dislocation, not fracture. If the *neck* be broken, the action of the muscles of the hip and of the iliacus internus, and psoas-magnus, turns the toe outwards. If the *toe* be turned inwards, you do not suppose it to be fracture. If the heel be shortened and the toe turned out, you then suspect fracture. If the leg seems shorter, you must not rest satisfied with this appearance, but measure the difference in length of heels, and examine if there be a correspondence between the position of the pelvis and that of the heels. For when there is inflammation of the hip, consequent on injury of that joint, you frequently have an elevation of one side of the pelvis, and consequently an apparent shortening of the leg on that side. This will very often deceive you; and hence the necessity of attending to the position of the pelvis, and always keeping in your mind, that a bruised and inflamed hip is attended with shortening of the leg. A person receives an injury of the hip, the surgeon is anxious to discover whether there is a dislocation or fracture. He convinces himself there is neither; the case

goes on, and in a month or two the patient hobbles about, and finds his leg shortened. Some ill-natured opponent comes in, and tells the patient you have treated the case improperly. Always keep in mind, that in severe inflammation of the hip, this may be the case; and you ought to explain this to the friends of the patient, and, if they think proper, have a consultation. Two months after the occurrence of an accident, and when your patient has a short leg, an explanation of this circumstance comes rather awkwardly. As our time has expired, we shall resume this subject next week, or wait until we have fresh cases of injury of the hip-joint, which are of very frequent occurrence.

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### ESSAY ON YELLOW FEVER,

BY DR. GILLKREST.

WITHIN the last few years much valuable information upon yellow fever has been from time to time furnished by Dr. W. Fergusson, inspector-general of hospitals; and it is to be regretted that want of space precludes the possibility of extracting, as freely as would be desirable, from documents furnished by a gentleman of such great experience, tact, and candour. His paper in the eighth volume of the *Medical Chirurgical Transactions* is particularly interesting, and refers chiefly to transactions which occurred while he was principal medical officer in the West Indies, in 1816, &c. Dr. Fergusson is quite adverse to the doctrine of contagion in yellow fever; and it will be admitted, as we conceive, that the facts which he has adduced in the paper just mentioned, are calculated of themselves to make a powerful impression. He shows that, without restraint as to intercourse, situation alone has given great comparative exemption from yellow fever to raw soldiers from England over civilians; that the disease "is confined, in all the islands, to the sea-coast;" and that, "at Barbadoes, our hospitals, of late years, have been in a regular course of importation of the yellow fever from the navy; but not even inoculation has been able to produce the disease upon any member of the hospital corps, by whom I may truly say that the sick have been re-

ceived with open arms; for the anti-social doctrines of ideal contagions are not preached among us here, to the prejudice of duty and humanity." Speaking of the general impression at St. Domingo, on the subject of contagion, during our occupation of that island, he says, "I never even heard the idea started, nor do I recollect a single precaution, advice, or observation, that acknowledged the existence of contagion, ever being directed to the medical staff from any quarter. I appeal to the writings of Dr. M'Lean, the living evidence of Mr. Weir, Dr. Jackson, Drs. Theodore Gordon, Borland, Inspector Warren, and all the medical officers who served there to bear me out in this assertion. I appeal to the evidence of every medical officer now serving in the West Indies, that has ever had experience of the disease (for there may very probably be found contagionists among those who never saw it), to say whether in their lives they ever met with a case of yellow fever that could with greater feasibility be traced to personal communication with a subject labouring under the disease, than to the ordinary natural causes from which it has been proved to originate." Dr. Fergusson's remarks go to corroborate the curious fact occasionally to be found in authors as to "different parts of the same town being differently affected; and so limited often is their influence, that one story of a house,\* or one section of a ship, will be strongly affected by it, while other parts of the same tenements remain healthy." In the paper from which these extracts are taken, will be found details

\* At Gibraltar, during the epidemic of 1828, we observed this to have been the case in a very remarkable manner in some instances; and Dr. Ramsay, surgeon to the forces, states, in an official report dated Barbadoes, 20th December, 1825, that, "in certain barracks and hospitals the very diagonal of particular apartments will afford a tolerably accurate demarcation of safe and unsafe position of beds." See on this point, also, Dr. Wilson's work on yellow fever (1827), in which the disease is shown to have been confined to men whose berths were on a particular side, or in a particular part of a ship.

of the highest value relative to the disease in question, as it prevailed among the crew of the *Regalia* transport, employed in carrying black recruits from the coast of Guinea to the West Indies in 1816; and from which it appears that the crew were in good health previous to taking in many tons of green wood at Sierra Leone; that great sickness (chiefly dysentery) prevailed among the blacks during the voyage; and that several deaths took place; but the yellow fever was altogether confined to the crew; and, in the words of Dr. Fergusson, "the ship, on her arrival at Barbadoes, was not put under restraint or quarantine, but communicated freely with the sea-ports of Barbadoes, the Saints, Antigua, and Guadaloupe; landing the severally ill or dying subjects of that disease amongst the inhabitants, and at the hospitals at Barbadoes and Antigua, without communicating infection at any of these places; and finally, after having undergone a thorough purification, sailing from Guadaloupe for Europe, crowded to a very great degree with rebel French prisoners and their families, from the jails, under the most dangerous circumstances of health, with a case of yellow fever actually dying on board the day before she left Basseterre roads, but without communicating any such fevers to the unfortunate passengers, leaving any behind her at Guadaloupe, or importing any at the ports she ultimately reached." Dr. Fergusson, when speaking of an epidemic which took place in the following year, says, "what a different interpretation the facts I have collected would have borne, had the present epidemic that afflicts the islands broke out in the ordinary course of the seasons, a year earlier, at the time the *Regalia* was here." We shall only offer one more extract: "At Martinique they established a strict quarantine, particularly directed against Guadaloupe, and they have been consumed with yellow fevers; but at Dominique, Tobago, St. Vincents, &c. where they established none

at all, they have not had, in as far as I have learnt, a single case, although at the last-mentioned islands both the Tigris and Childers ships of war imported distinct well-marked instances of the disease from *Point au Pitre*, on the evacuation of Guadaloupe."

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ST. GEORGE'S HOSPITAL MEDICAL  
AND SURGICAL SOCIETY.

Thursday, Dec 20, 1832.

MR. KEATE IN THE CHAIR.

MR. HUTCHINS read a paper on erysipelas, in which he advocated the employment of bark in every form of the disease.

Mr. Smith related a case, in which the complaint commenced in the nates and proceeded from thence upwards. The patient got well under calomel, combined with antimony and the saline treatment.

Mr. Cooper stated, that he had taken several cases of erysipelas, which had occurred in the hospital; several had recovered under the use of salines; these were simple forms of the disease. Many were obliged to leave off the bark. He thought that those who attended the physician's practice might recollect some of the cases.

Dr. Aldis remembered a case, lately in the hospital, the symptoms of which appeared to be aggravated by bark; citric acid, with ammonia, was substituted, and the patient soon became convalescent.

Mr. Cooper corroborated the previous statement.

Mr. Babington thought that bark ought not to be used indiscriminately: he had seen cases protracted by its use.

Mr. Pollard was of opinion, that inflammation of the pleura had come on from the employment of bark. He alluded to Mr. Lawrence's paper, and thought that bark was required in most instances, but that salines were better in the first stage.

Mr. Fernandez said, that incisions were absolutely necessary when suppuration took place under the occipito frontalis muscle.

THE

**London Medical & Surgical Journal.***Saturday, December 29, 1832.*INJUSTICE TOWARDS THE MEDICAL  
PROFESSION.

THE elections are now nearly concluded, and every rank in society is represented in Parliament except the medical profession. It is true there is one physician returned, Dr. Baldwin, of Cork, but it is entirely on account of his political opinions. This enlightened and liberal gentleman had arrived long since at eminence; and therefore he may take little interest in the affairs of the faculty, or in the degraded and distracted state of the profession to which he belongs.

We regret much the want of a medical representative; one who would expose the anomalies, defects, and abuses, in the medical corporations; and by placing them before the Legislature and public, reform would speedily follow. Until some medical gentleman brings forward the question in the House of Commons, the antiquated laws of Henry VIII. with all their imperfections, will remain in force. These laws confer certain powers on the Royal College of Physicians, and it is contrary to human nature, that this body will consent to lose its privileges. As the President and Fellows of this College are court physicians, and have influence on the royal ear, they will naturally declare that the laws, which make them monopolists,

are wise and excellent. They will employ the same arguments to the government; and, therefore, whenever a committee of inquiry into the state of the laws relating to the medical profession is moved in parliament, and it will most certainly be moved the ensuing session, the government will most probably oppose it. But had there been a fearless able advocate, in favour of the measure, who would show the house and the country the absolute necessity of improving the laws regarding the conservation of public health; every rational man in the kingdom would see the expediency of modifying enactments unsuited to society in this enlightened age.

Were we to attempt to expose the numerous defects and abuses in the medical profession in this country, it would require the appropriation of several of our numbers to do justice to the subject; and, after all, of what utility would be our labours, as they could not come before the legislature and the public? If the press would aid us, our endeavours would not fail to be crowned with success; but, unfortunately, that great corrector of abuses pays no attention to medicine. It patronizes all other learned professions—all the arts and sciences—and neglects that one which is more important to mankind than the whole, with the exception of divinity. We see the public papers filled with all matters except medical, and much of their varied contents of no interest to the enlightened part of society. There will be space devoted to a thousand insignificant topics, but not a line to

the improvement of that science without the aid of which all the temporal concerns of mankind are valueless. If health be the choicest blessing of man, it ought to be preserved and protected; it ought not to be injured and destroyed by ignorance. We are happy to perceive a small portion of the public press is beginning to afford a niche to medical subjects. We hope and trust that the time is not far distant when the leading journals will follow the example.

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CONCLUDING NOTES FROM  
PROFESSOR MAGENDIE'S  
LECTURES ON CHOLERA.

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IN the obscurity, in which the cause of this singular disease is still involved, the Professor can suggest no other modes of prevention than attending to those general rules favourable to health, attention to diet, without, however, particular deviations from what persons have been used to, to the condition of dwellings, avoiding bad localities. Fear, misery, and depraved morals are favourable to its extension. Is unable to explain, however, why the higher classes in England suffered more than those of France. Is satisfied, from circumstances which passed under his own observations, that, in a family, the panic and agitation of mind caused by an attack, or by the death of one of its members, may predispose other members of it to attacks, which circumstance may lead to a false conclusion, as that the disease had been propagated by contagion.

Dr. Magendie is not disposed to attribute specific effects to the chlorides, as *disinfectants*, seeing their inefficacy in Russia and Poland; and at the *Hôtel Dieu* their employment was abandoned. In the *salle des*

*morts* of the latter establishment, in which upwards of a thousand corpses had been placed during the epidemic, not one of the attendants was attacked, which probably would have been attributed to the effect of the chlorides, had they not been discontinued early. At the Academy of Medicine, a fact has been stated, relative to a chlore manufactory, near Paris, in which all the workmen perished.

Regarding the explosion of the epidemic in Paris, the Professor observes, "The sudden appearance of the epidemic, and simultaneously in all the quarters of the capital, is an event not admitting of explanation."

"There are, gentlemen, persons wiser than we are; men known by the name of *contagionists*. These persons have the prodigious advantage of knowing how this disease, originating in India, advanced slowly towards the north of Europe, to make its appearance in England and France." Here Dr. Magendie most effectually employs the shafts of ridicule against the contagionists and their *germs*, sanitary regulations, &c., and seems justly indignant at the manner in which the views of such people are countenanced by governments. He shows how, when at Sunderland, during the epidemic there, different statements, regarding the importation of the disease, were falsified.

Speaking of what passed under his own observation during the Paris epidemic, he says, "I lived among cholera patients for some months; I have myself made about a hundred *post mortem* examinations; I have passed entire days in the wards and amphitheatre, and have not witnessed a single circumstance which could make me suspect the agency of contagion. I have seen diseases, which possessed a contagious property, and if I had witnessed any thing which should impress me with doubts, as to contagion in cholera, I would not hesitate to say so. Contagion being a natural phenomenon daily observed in different diseases, why should I not declare it in this, if I knew it to

exist. Further, it would indeed be for the advantage of humanity, that its mode of propagation was by contagion, for then its progress might be stayed." During the prevalence of typhus in Paris, in the year 1815, a great mortality took place among the physicians and medical students, contagion having, in that instance, been evident; "but, happily, in regard to the cholera, nothing of this kind occurred: we did not see that any body took the disease from having been in contact with persons labouring under it. I do not pretend to say, that attendance on cholera patients gives an immunity from attacks, but I defy any body to cite a fact really proving contagion. At the commencement of the epidemic, some physicians, fearing contagion, or believing that they were labouring under an attack, found themselves under the necessity of suspending their duties; they were right in doing so, for, whether ill or under the influence of fear, a physician is less able to fulfil his important functions, and more disposed to an attack of the disease. One physician only of the establishment [Hôtel Dieu] was seriously ill." Of the *Sœurs de la Charité* in attendance there, two only were attacked. Of the many students and attendants of all classes, some were attacked, and a few died. The instances brought forward, as proofs of contagion, where relatives, or persons in the same dwelling, are attacked, Dr. Magendie shows to be far from evidence of the propagation of a disease by that mode. He could cite many instances where one person only in a house has been attacked.

Finally, referring once more to rigid "sanitary" laws, this distinguished teacher says, "And should it be true, gentlemen, that this doctrine of contagion is founded on ignorance, is the law which sanctions it *executable*? No, certainly, *elle seroit frappée de réprobation*. Recollect what has passed in Europe regarding sanitary measures; recollect the massacres at St. Petersburg, in Hungary, &c., and you will see that such legis-

lation was a hundred times more injurious than advantageous."

[In giving, from time to time, within the last few weeks, in a condensed form, the observations of an eminent man, who has well studied an important disease, we are not aware of having omitted to place on record any important remark. Throughout the observations on cholera, as delivered to his class, we find in Dr. Magendie the spirit of true philosophy and readiness to admit the *nescio*, so invariably the attributes of men of his calibre. In what we have to-day furnished will be found the key to the disparagement lately cast upon the lectures of this eminent man, by a contemporary, always faithful in the discharge of his unworthy duties towards the party by whom he is employed.]

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### Reviews.

*On the Influence of Physical Agents on Life.* By W. F. EDWARDS, M.D. F.R.S., Member of the Royal Academy of Sciences, &c. &c.; translated from the French by Dr. Hodgkin and Dr. Fisher. To which are added, in the Appendix, some Observations on Electricity. By Dr. Edwards, M. Pouillet, and Luke Howard, F.R.S. On Absorption and the Uses of the Spleen. By Dr. Hodgkin. On the Microscopic Characters of the Animal Tissues and Fluids. By J. J. Lister, F.R.S. and Dr. Hodgkin. 8vo. pp. 483. London, 1832. Highley.

DR. EDWARDS is known to the scientific part of the profession as one of the ablest physiologists of the age, and his fellow labourers are also gentlemen of considerable eminence. He has been indefatigably engaged in experimental physiology for at least sixteen years, and his labours have been repeatedly crowned with success by the Academy of Sciences. These essays were reprinted in one volume, the

object of which is the examination of the effects of those agents by which we are surrounded, and whose influence is incessantly exerted upon us. The work before us, which is a well executed translation of the original, relates to the air in its several conditions of quantity, motion, or rest, density or rarity; to water in a liquid state and in a state of vapour; to temperature, as modified both in degree and duration; to light and to electricity. The influences of these agents, on man and vertebrated animals, has been determined by a vast number of experiments. The conclusions are of vital importance in practical medicine, and therefore deserve the utmost attention and consideration. The author has reconciled the opposite opinions of many distinguished physiologists, and accumulated a mass of curious and interesting information. The papers in the Appendix are highly creditable to the writers. The work is an excellent guide to those who may be hereafter engaged in prosecuting experimental physiology.

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*A Treatise on the Urethra; its Diseases and their Cure.* By BENJAMIN PHILLIPS, Author of a Series of Experiments on Arteries, &c. 8vo pp. 319. Plates. London, 1832. Longman and Co.

OF all the works on urethral diseases which have fallen to our lot to notice during our editorial career, this is the most graphic, correct, and satisfactory. After a minute anatomical description of the urethra, in which the author dissents from his predecessors, he gives its pathology, then urethritis, catheterism, retention of urine, treatment of stricture, including dilatation, cauterization, and incision, puncture of the bladder and urethra, abscesses and fistulæ of the perinæum, and, lastly, disease of the prostate gland. The fidelity and accuracy with which these articles are executed are, as far as our researches enable us to determine,

unequaled. The author has drawn from the best sources of information, both national and foreign; condensed the whole, and appended his own conclusions. He adduces a mass of evidence to prove, that the cure of stricture by bougies or dilatation is by far less perfect than that by cauterization. Thus opposing, and we think very properly, the received opinions of the most eminent surgeons in this country. But the merit of overturning the practice of dilatation belongs to M. Ducamp of Paris, and not to our author, as his preface would lead us to believe; and to this gentleman also belongs the identical instruments which are proposed in the work before us as original. They are exact copies, with one exception, as will appear by referring to M. Ducamp's "*Traité de Retentions d'Urine par le Retrecissement de l'Uretere, et des moyens à l'aide desquels on peut détruire complètement les obstructions de ce canal.* Paris, 1825." Had not Mr. Phillips quoted this author, we should suppose he had not seen his work, and then be induced to believe, that his instruments were original. He is, however, entitled to great praise for the ability and excellence of his own descriptions, and for his adoption of a plan of curing stricture by a safe, speedy, and unobjectionable mode of applying caustic, but which was first sanctioned by the Royal Academy of Sciences of Paris, May 6, 1822. But as Ducamp's work has been overlooked by all our preceding writers on strictures, we are gratified that its contents are now placed by our author before the profession in this country. We therefore advise every surgeon to possess himself of the work before us, because it is decidedly superior to all in our language on the subject. We have not the slightest doubt, but the practice it inculcates will be generally and speedily adopted. Let it be remembered, that our critical accusation against the author amounts to slight plagiarism. We have already awarded praise for all that is original in this work, except for the detail of



the numerous cases in which he has found the new plan, if we can so designate it, superior to the old and general one. He has proposed an instrument, which he terms urethrotome, for incising stricture, so as in some cases to facilitate the introduction of caustic into its interior.

The great objection to caustic was, that it was applied along the whole urethra, thereby destroying the mucous membrane, inducing contraction, and causing the disease for whose removal it was employed. To obviate this, M. Ducamp proposed his *port caustique*, formed of a gum elastic catheter, which concealed a platina tube, containing, near its extremity, from five to ten grains of nitrate of silver, fused, by means of a lamp, into the side of the tube, and thus immovably fixed. The advantage of this instrument is, that it can be passed down to the stricture, and then the caustic can be accurately applied to the diseased part, and to no other. After its application it is withdrawn into an elastic tube, and therefore no part of the urethra, except the strictured one, is touched by the caustic. But before using this caustic apparatus, M. Ducamp employs a sound for exploring the stricture (*sonde exploratrice*) which is called "the model sound" by our author, and is prepared as follows:—He takes an elastic catheter open at both ends, and passes through it a plat of silk, leaving about half an inch projecting beyond the extremity; this is dipped in a liquified composition of equal parts of bees' wax, diachylon, and shoe-makers' wax, allowed to cool, and then is moulded somewhat smaller than the catheter. When this is passed against the stricture, an impression will be made on it, so that on withdrawing it, the operator is able to determine the exact position and size of the urethral obstruction; and thus he can apply the caustic apparatus with certainty and safety. When the urethra is nearly imperious, and the caustic cannot be applied, the urethrotome, which is somewhat similar to a sharp sound, is in-

troduced, to make way for the former; and here our author is entitled to credit for his invention. Several figures are given illustrative of the impressions made on the model sound, and of the various strictures, and these are much more perfect than Ducamp's. Both these gentlemen maintain that caustic is the best remedy in old indurated strictures; that its application is not more painful than the introduction of a bougie; that the slough usually separates in three or four days; and then that the jet, or stream of urine will be much larger. A cure is effected by three applications, generally, in the course of three or four weeks; whereas the plan by dilatation would require as many months, and even, at the expiration of that time, be unsuccessful. When a cure is effected by caustic, a bougie should be introduced twice a week, to prevent consecutive contraction. Ducamp recommends a bellied bougie for the purpose; which is made by applying some of the composition already described near the extremity of a bougie, in a conical form. M. Phillips has added tables of the comparative merits of all plans of treating strictures, and, with Ducamp, admits that certain cases will require every mode now in use.

We have not perused a work for a long time with more pleasure and satisfaction than that before us; every page of it is replete with instruction, and proves the author to be a surgeon evincing research, scientific attainments, practical experience, and ability. We part with him impressed with sentiments of respect, and we again express our regret, that stern impartiality compelled us to find fault with his truly valuable work; but justice was due to all parties.

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*The Physician's Vademecum; or, A Manual of the Principles and Practice of Physic; containing the Symptoms, Causes, Diagnosis, Prognosis, and Treatment of Diseases: accompanied by a select Col-*

*lection of Formulæ, with a Table of the Doses of all Medicines now in use.* By ROBERT HOOPER, M.D., Bachelor of Physic of the University of Oxford; Member of the Royal College of Physicians in London; late Physician to the St. Mary-le-Bone Infirmary; &c. &c. New Edition, considerably enlarged and improved. London: Renshaw and Rush. 1833.

A NEW edition of the work before us was called for some years since, and we are at a loss to imagine the reason it has been so long withheld. Few medical works have had so large a sale as this; and therefore it is strange that the last edition, published nearly ten years ago, and long out of print, had not been enlarged until this time. The edition before us is greatly improved; a vast deal of important matter has been added to it; and it is brought down to the present period. The student and the practitioner will find it an instructive and valuable work. It is beautifully printed, and published on very moderate terms. It is a work that cannot be reviewed; but we shall give the author's and the editor's prefaces, to enable our readers to form their own opinions on its merits.

*Author's Preface*—The following concise account of the several diseases that fall under the province of the Physician was committed to the press, with the hope of its proving useful to students, and those practitioners in medicine who, from their professional occupations, or other circumstances, may not have it in their power to consult the more voluminous works that have contributed so much to the improvement of medicine.

"The very extensive sale of the work, and its having been translated into most of the continental languages, induce the Author to believe that his labours have been generally approved.

"It has been his object to compress, within a smaller compass than has hitherto been done, consistently with utility, every thing which more especially deserves attention with a view

to the treatment of diseases. In pursuing this design, he has discarded all theory, and retained only those leading facts with which it is absolutely necessary for a practitioner to be acquainted when he approaches the bedside of his patient.

"Under distinct heads are arranged,

"1. The characteristic symptoms by which diseases are known.

"2. The causes from which they most frequently have their origin.

"3. The circumstances that more especially point out the difference between diseases which resemble one another.

"4. The signs which influence the judgment in forming a prognosis of their event.

"5. That mode of treatment, which, in the present improved state of medicine, is deemed most appropriate, and which experience has sanctioned.

"The select collection of formulæ, glossary of terms\*, and the table showing the doses of all valuable medicines he employed, will, the author trusts, combine to render the volume more extensively useful.

"*Saville-row, August, 1823.*"

*Editor's Preface to the new Edition.*—The editor of this edition has prefixed to the original work an epitome of the latest views on the principles or institutions of medicine; by which he is induced to hope he has considerably enhanced its value. He has devoted the first sixty-four pages to the subject, and introduced the most important and recent opinions on physiology, pathology, and therapeutics. He has given a fuller description of semeiotics, or signs of diseases, than will be found in any work of this size hitherto published, or in any of the elementary treatises on the practice of physic which are in the hands of students. In this

\* The glossary of terms has been omitted in this edition, and its place supplied by a table of the names and doses of all remedies in the British and Foreign pharmacopœia.—E.D."

article are comprised the normal and abnormal indications of every organ, and of every physiological system in the human body. The matter that claims peculiar attention are the phenomena and morbid signs afforded by the heart in health and disease; in which are the latest conclusions of the illustrious Laennec, and of the most eminent of his successors, Dr. Corrigan, Dr. Haycraft, Dr. Graves, and Dr. Hope. The history of the pulse has been considered an integral part of the functions of the circulatory system, and therefore has been appended to it, and is the only succinct reference offered to students in our language.

"The next addition of importance is the introduction of M. Laennec's last description of the phenomena and morbid indications discoverable by auscultation, together with the modifications made by Dr. Forbes, Dr. C. Williams, Dr. William Stokes, Dr. Townsend, and Dr. Hope; and also the signs furnished by percussion, succussion, and mensuration. The indications deduced from the cerebro-spinal system, including the intellectual faculties; from the digestive system, the secretory system, the locomotive system, and the genito-urinary or genital system will, it is supposed, supply much valuable information to those commencing the study and practice of medicine.

"The succeeding section on general therapeutics, and especially on the actions of medicines upon the living body, has been compiled from the best works on the subject, especially those of M. Barbier, Dr. Spillan, and Dr. A. T. Thomson, and will be perused with advantage by the junior members of the profession. The articles on synochus, intermittent fevers, typhus, and the exanthematous diseases, have been modified according to the most recent opinions; while that on phrenitis, or cerebritis, has been almost remodelled; and those on meningitis, arachnitis, diseases of the heart, carditis, pericarditis, peritonitis, pathology of apoplexy and paralysis,

vaccina, cholera epidemica, and pleurodynia, are editorial productions. The pathology of numerous diseases is also appended.

"All new medicines of undoubted value have been introduced; among these are the chlorides of soda and lime, Lugol's preparations of iodine; ilicina, salacina, piperina, strychnina, and quinina, with appropriate formulæ for their exhibition.

"A table, showing the doses of the most efficient medicines in the British and foreign pharmacopœiæ, has been substituted for one which exhibited the modern and ancient names of drugs; as this will be extremely convenient to those engaged in practice. The editorial additions throughout the work, with the exception of the first page, which was inadvertently omitted, have been placed in brackets, excepting also a few verbal alterations; and for these the editor, and not the learned and distinguished author, is of course responsible.

"The unprecedented success of Dr. Hooper's Physician's Vademecum, upwards of 20,000 copies of it having been disposed of in a few years, acted as a powerful incentive to the editor to use his best exertions in collating the numerous facts and discoveries which the rapid progress of medicine has elicited since the last edition of the work was published, being a period of nearly ten years. He may, perhaps, take leave to observe, that he has employed great care and caution in introducing new remedies; for he is one of those who hesitates to adopt indiscriminately all new doctrines and remedies until he has tested their value by personal observation.

"London, December 15, 1832."

The work ought to be in the hands of every medical student and practitioner.

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ILLUSTRATIONS OF QUACKERY —  
IGNORANCE OF CHEMISTS AND  
DRUGGISTS.

IN the year 1794, a Society was formed, denominated "*The General*

*Pharmaceutic Association*," in consequence of the hordes of illiterate quacks and druggists who undertook the practice of surgery and the preparation of physicians' prescriptions. The following graphic description of these persons is given by the late Dr. Mason Good (*Life*, by Dr. O. Gregory), and is as perfectly applicable to the race of pretenders to medical knowledge of the present time, as we have frequently proved in this periodical. We could relate as many instances as will be found in the following extract, which have fallen under our own observation. The audacity and temerity of uneducated and unprincipled men, in attempting to practise and prepare medicine, calls loudly for prevention; but thanks to our indolent corporations, this state of things may continue for aught they care. We have reason to know, that the reign of medical misrule will terminate before twelve months. The state of the profession will be brought before the reformed parliament, and once fairly placed before the nation, an immediate improvement must follow. It is absurd to suppose with judges, that quacks ought to be tolerated, on account of the scarcity of educated medical practitioners in certain remote parts of this country; but we should like to be informed in which of our villages there cannot be found a medical man. If the medical corporations co-operated, as they are bound to do, and memorial the government to protect all educated practitioners, and especially to protect the public health from the fatal temerity of unlettered knaves who destroy it, the request would be granted without delay. Let us attend to Dr. Good's description of the pretenders to medical knowledge.

"Not only in London, but in almost every town in Great Britain, men of the most illiterate character and habits, ignorant of the science of medicine, of the formulæ of prescription, of the theory and practice of chemistry, ignorant, often, even of the English language, obtained extensive

business as *druggists*, and not unfrequently connected with that the occupations of bleeding, tooth-drawing, and bone-setting. In various instances, country grocers had practised actively in these *kindred* departments: and the mischief, as may easily be conjectured, was immense. A man practised surgery and pharmacy, no farther from London than the village of Beckenham, whose whole medical education consisted in having been '*stable-boy*, for two years, to a surgeon in that neighbourhood.' At Uckfield there were *three* '*grocer-druggists*' who prescribed, and in cases of difficulty applied to their London drug-merchant for help. Some '*drug-dealing grocers at Marlow*' substituted (for want of better knowledge) arsenic for cream of tartar, tinctures of opium and jalap for those of senna and rhubarb, and nitre for glauber's salts; thus ruining instead of restoring the healths of those who were unfortunate enough to consult them. A druggist at Croydon, after labouring hard to ascertain the precise meaning of the words '*cucurbita cruenta*,' discovered at length, with the kind aid of an equally learned disciple of *Æsculapius*, that they denoted '*an electric shock*.' A medical gentleman at Worcester prescribed for his patient as follows: '*Decoct. Cascariillæ*  $\zeta$  *vij.* *Tinct. ejusdem*  $\zeta$  *j.*' The shopman who had the principal care of the business, having sought in vain for a phial labelled *Tinct. ejusdem*, sent to the shops of other druggists to procure it: but the search was fruitless, there was no *Tinct. ejusdem* to be procured in the city of Worcester, and the prescription was actually returned to the physician with an earnest request that he would substitute some other ingredient for this scarce tincture! Another blunder, but, unfortunately, of serious consequence, occurred in the year 1795 in the same city. A physician being requested to prescribe for a boy of ten years' old, the son of a poor woman, labouring under a dyspnoea, directed this draught to be given him at bed-time: '*R Syr. Papav.*

Alb. ʒj. Tinct. Opii Camph. ʒss. Aq. destill. ʒvss.' It was prepared by a druggist's shopman, who had not heard of the new name for Paregoric Elixir, and therefore made it with ʒij. of Tinct. opii: he advised the mother to give the child only half of the draught, but that proved sufficiently strong to deprive him of life in about twenty-four hours."

#### AVERAGE MORTALITY OF EUROPEANS.

THE average mortality in England and Wales . . . . . is		
France . . . . .	1	in 60
Sweden and Holland . . . . .	1	in 48
Russia . . . . .	1	in 41
Austria . . . . .	1	in 38
Prussia and Naples . . . . .	1	in 35
Leghorn . . . . .	1	in 35
Switzerland . . . . .	1	in 49
Rome . . . . .	1	in 25
Palermo . . . . .	1	in 31
Madrid . . . . .	1	in 29

It is said that in France, about one-half the population live to 20 years, and a third to 45. The lowest mortality is at the age of 10, being 1 in 180, while at the age of 40 it is 1 in 53. The duration of life, at 50, is 23 years, and 12 years longer among the rich than the poor. Since the late peace, the governments of Europe have paid great attention to statistics; and we have now returns from all parts of the continent, by which it appears, that the mortality of Great Britain, her cities, and her hospitals is greatly inferior to that of any other country in the old world, and that this nation is the most healthful of all.

#### BAD EFFECTS OF SMOKING TOBACCO.

THE practice of smoking is now so general, that our atmosphere is strongly poisoned with tobacco-smoke. The air is sufficiently impure in this metropolis without further contamination. At every corner we see a number of pipes or cigars, especially

in the mouths of boys and young men. The bad effects of tobacco are first produced on the glands of the mouth, which form the saliva; these are excited and form an increased quantity of this fluid, which, instead of passing into the stomach, to assist in digesting the food, is expelled from the mouth. Great smokers have weakened powers of digestion, and are subject to bilious and nervous complaints, lowness of spirits, and diseases of the lungs and brain. The German medical writers allege, that of twenty deaths of men, between the ages of eighteen and thirty-five years, ten are destroyed by tobacco. This substance is one of the most powerful narcotics and debilitants; will produce stupor, drowsiness, head-ache, vomiting, and defective vision when used in excess; and, therefore, when long continued, and frequently employed, must be injurious to health.

#### EXCISION OF THE HEAD OF THE HUMERUS.

(From the *Edinburgh Medical and Surgical Journal of October.*)

JAMES SOMERS, aged 36, presented himself at the hospital on the 1st of June, on account of an abscess over the anterior part of the right deltoid. He had complained of pain in the joint for fifteen months previously, but could not assign any cause for the disease. The abscess was opened, and found to contain thin serous-looking fluid, with large masses of yellow substance, resembling coagulable lymph, in the form in which it is effused from serous surfaces. The patient again applied on the 6th of August, when his appearance was so much altered that he could not have been readily recognized. He was thin, pale, and evidently exhausted by continued suffering. A sinus remained where the abscess had been opened, and a profuse thin discharge issued from it. The shoulder admitted of very little motion; when either moved or pressed, it was extremely painful; and, inde-

pendently of such excitement, there was always an uneasy sensation in the limb, shooting from the shoulder to the elbow and fingers, which during the night was so distressing as to deprive him almost entirely of sleep. The arm appeared longer than the other, but when measured, was found to be of the same length. A probe could be passed readily in various directions under the integuments, and also after some searching into the cavity of the joint, where it encountered a rough surface of the bone.

As it appeared that the removal of the diseased bone was the only measure adequate to afford the patient relief, and as he had no objection to suffer whatever was thought necessary, the operation of excision was performed on the 21st of August. An incision was made from the opening of the sinus downwards, nearly in the direction of the fibres of the deltoid muscle, about four inches and a half long, and from the lower extremity of it another was carried upwards and backwards to the extent of two inches and a half. The flap thus formed was dissected up so as to expose the joint, and then, as there was considerable bleeding from various small arteries, a few ligatures were applied. The capsular ligament was destroyed by the disease at its upper part, but remained entire at the sides, where it was next divided, together with the attachments of the scapular muscles. The head of the humerus being now turned out, was nearly cut through by the saw below the tuberosities, and completely detached by means of the cutting forceps. The cartilage was considerably eroded, and several carious excavations of the bone existed at the upper margin of the articular surface. The glenoid cavity of the scapula seemed perfectly sound, and therefore was not removed. The edges of the wound were stitched together, and supported by a spica bandage.

The patient suffered hardly any constitutional disturbance from the operation. He sat up for several

hours on the fourth day after it; and has now the prospect of being soon restored to health.

## NOTE ON THE USE OF IODINE.

BY DR. RYAN.

## TABES MESPENTERICA—RACHITIS—HYDROPS OVARIA.

*Tabes Mesenterica—Rachitis.*—In several cases of children of two and three years of age who laboured under tabes mesenterica, a complete cure was effected by the internal and external use of iodine. It was ordered as follows:—

R. *Tinct. iodinae* ℥ ij.—iv.  
*Syrupi simplicis* ℥ iss.  
*Dosis cochleare minimum bis in die.*

R. *Iodinae pulveris* ℥ ss.  
*Potassae hydriodatis* ℥ j.  
*Adipis scrilla* ℥ j.  
*Tinct. opii* ℥ j.

*Fiat unguentum cujus drachma fricetur abdomen mane vespereque.*

*A flannel bandage to be applied round the abdomen.*

When the alvine dejections were depraved, the hydrargyrum cum creta, combined with rhubarb and aromatic powder, was employed. The diet should be attended to, and consist of arrow-root, sago, tapioca, mealy mashed potato, with gravy. Meat is injurious until dentition is complete.

The same remedies have restored ricketty children after three or four months.

Though Lugol disapproves of exhibiting the tincture of iodine in syrup, or in bitter infusions, on the grounds of its being decomposed, repeated experience has proved it efficacious in such combinations.

When we consider the fatality of mesenteric and rachitic diseases among the poor, we must be gratified at our ability to remove them.

*Hydrops Ovarii.*—A young lady, ætat. 20, of a leuco-phlegmatic and bilious temperament, and spare habit, complained of dull pain in the right

groin, which darted down the limb. It had continued for six months, and was ascribed to external injury. About two months ago (Oct. 31, ult.), she applied for advice under the following circumstances. The abdomen was the size of that of women in the eighth month of utero-gestation, afforded fluctuation on percussion, and had gradually enlarged from the right side. No appetite, slight thirst, sense of oppression in the præcordia, confined bowels, paucity of urine, catamenia every fortnight, mammæ flaccid, leucorrhœa, no œdema of the inferior extremities, disturbed and unrefreshing sleep, sense of faintness three or four times a-day. Auscultation afforded no evidence of gravidity. She was ordered the following medicines:—

R. *Extract. colocynth. comp.* ℥ij;

— *hyosциami* ℥i;

*Hydrargyri submur.* ℥ss;

*Pulveris capsici gr. iv.*;

*Olei mentha pip.* ℥ iv;

*Fiat massa in pilulas xvj. distribuenda, ex quibus sumat duas hora somni, et alteram mane donec alvus saluta sit.*

R. *Infusi gentianæ comp.* ℥vj;

*Tinct. ejusdem* ℥ij;

— *iodinæ* ℥ij;

*Olei mentha pip.* ℥ij;

*Dosis coch. ampl. 3 in die.*

*Fricetur abdomen unguenti antimoni tar- tarizati drachmâ, mane vespereque, donec erumpant pustula. — Diet mild and nutritious.*

At the end of two months the abdomen is nearly reduced to its natural size, the appetite is good, the catamenia natural, the sleep refreshing, the appearance of the countenance better, and the strength very much improved. She continues her medicines.

The acetas plumbi with liq. opii sed., and acid. acet. dil. was given a week before each menstrual period, and the pills and mixture omitted. This formula produced its usual good effects, and after two exhibitions, prevented the recurrence of menstruation every fortnight. Her periodical health was not so good as at present for a long time.

OBSERVATIONS ON THE EMPLOYMENT OF THE MARCHANTIA HEMISPHERICA, IN THE TREATMENT OF SEVERAL FORMS OF DROPSY.

BY THOMAS SHORTT, M.D. F.R.S.E.

(From the *Edinburgh Medical and Surgical Journal*, No. 37.)

IN the treatment of dropsical affections, it is of importance to ascertain if the urine is changed by heat. If it coagulates, and is specifically lighter than natural, disease of the kidneys may generally be inferred; whereas if it continues clear, or becomes so from a turbid state on being boiled, and if its specific gravity is high, better hopes of relief or restoration to health may be entertained; since then there is less chance of the kidneys being organically affected. In the former case, experience has pointed out the superior efficacy of blood-letting and *digitalis* liberally given; whilst in the latter mercury and squills have been found more beneficial, particularly when aided in obstinate cases by purgatives, sudorifics, and diuretics, such as *elaterium*, Dover's powder, the acetate of potash, sweet spirits of nitre, gin, decoction of broom tops, and cream of tartar, which, in curable cases, is probably one of the most valuable means we possess. In dropsies from imperfect absorption, where the action of the heart and arteries is languid and feeble, the mental and bodily powers depressed, accompanied by sallowness of the skin, even in the early stages of the disease, short dry cough, or breathlessness excited by the most trifling exertion, unaccompanied by disease of the heart, loaded tongue, and high-coloured scanty urine, these remedies require to be combined with tonics. The same treatment may also apply when the effusion arises from laxity of fibre or deficiency of the red globules of blood, as marked by whiteness of the complexion, with more clearness of the skin than in other cases; paleness of the lips; the mental faculties not being weakened in proportion with the powers of the

body; the tongue being unusually clean, and at the beginning of the complaint there being neither cough nor breathlessness on making exertions, and the urine being pale and watery; the anasarca too, shifting from one part of the body to the other, according to posture, and pitting more deeply on being pressed than in other cases, forms a similar indication.

Dropsical affections, however, are symptomatic of so many different causes, that, notwithstanding the great variety of means in use for their cure, they are more usually fatal than other diseases, from long continuance in many instances, and from being generally connected with extensive organic visceral disease, producing obstruction to the free circulation of blood through the system at large. While such cases admit only of temporary relief, in others the fluid may be evacuated, and life may be prolonged by the proper employment and combination of remedies. But having been frequently disappointed in the treatment of dropsy by the unsuccessful results of the various means of cure in general use, and having often seen the deleterious effects of mercury and digitalis in some constitutions, more especially those with a strumous taint, I was induced to try the effects of liverwort,—a remedy often beneficially employed in such cases by the lower orders in Ireland,—on accidentally hearing of its power as a diuretic in several remarkable instances, from an individual who had personally witnessed its efficacy.

This plant consists of spreading leaves of a leathery crustaceous matter, cut not very deep into lobes, entire about the edges. It grows in almost every country, abounding chiefly, however, in moist and shady places, and on the banks of rivers, and is to be met with at all seasons of the year, but is supposed to be in its greatest vigour about the end of autumn.

I have now been in the habit of employing liverwort for several years in dropsical affections. In many cases it has been astonishingly successful;

but it has, like other diuretics, failed. I cannot say, having frequently given it in decoction, I have seen the slightest benefit derived from its internal use; but employed externally, in the form of poultice, I consider it of great value. The poultice is prepared by carefully picking and washing about two large handfuls of the leaves; these are thrown into a pot, containing about a quart of boiling water, and simmered by the side of a fire for twelve hours, adding fresh water if required. It is then beat into a pulp, and as much linseed meal stirred in as to bring it to the consistence of a poultice, which is spread on flannel and applied to the abdomen, and fastened with a pretty tight bandage; or it may be applied to the legs if anasarca of the extremities alone exists.

I have always repeated the application of a fresh poultice every twelve hours till the water is drained off; or continued it for such a time, as to show that no benefit may be expected from it, which will be ascertained in two or three days. The poultice produces, in general, copious perspiration, and at the same time acts powerfully on the kidneys. In some constitutions, it occasions feelings of great sinking and exhaustion, but I have never known it do harm. No medicines of any kind have been given whilst the poultice is applied, unless the sinking feeling above described is distressing, when I have found the *spirit. ether. nitros.* in small doses, remove it; but its effects are increased by the patient's drinking plentifully of warm fluids; and I have always preferred weak beef-tea or chicken-broth, with the view of keeping up the strength, which is generally at a low ebb in such patients. Opiates of all kinds I have found hurtful; but I employ warm clothing, and keep the patient in bed during the whole period in which the poultice is applied. I may also add, that it appears most successful in cases where other remedies have been extensively employed and failed, probably from the



kidneys having been long previously excited; and, judging by the state of the urine, when it is high-coloured, loaded, and depositing considerable sediment, which, on being exposed to heat, becomes clear; but I have also found it of service in cases where the urine coagulates from heat, and thus evidently showing disease in the structure of the kidneys.

#### MIDDLESEX HOSPITAL

A VACANCY has occurred in the office of Assistant-Surgeon to the Middlesex Hospital, in consequence of the death of Mr. Joberns, on the 15th inst., the candidates for which are Mr. Tusson, Mr. Shaw, and Mr. Phillips.

#### NECROLOGY.

DEATH has been energetic among the votaries of science during the past year. This insatiable tyrant has removed many illustrious members of the republic of medical literature. Among these were Sir Everard Home, Sir John Leshe, Baron Portal, Count Chaptal, Baron Cuvier, M. Serrulas, M. Delpech, Signore Scarpa, Mr. Joberns, and M. Rudolphi.

##### DEATH OF THE CELEBRATED SCARPA.

The justly celebrated Scarpa died on the 30th of October, in the 87th year of his age. He maintained the fame of the University of Pavia for many years. He has done more for science, though his hospital contained but fifteen beds, than any surgeon to our large hospitals. His works on Anatomy, Physiology, Diseases of the Eye, and Hernia, have been translated into all the European languages.

#### LITERARY INTELLIGENCE.

NEW Work on Morbid Anatomy.—Dr. Hope has favoured us with No. 1. of his intended work on Morbid Anatomy, adapted to the Elements of M. Andral. The plates are beautifully coloured, and are original illustrations of the author's researches. Such a work as this was long wanted in our literature, and cannot fail to receive the fullest encouragement.

#### BOOKS.

THE Physician's Vademecum; or, a Manual of the Principles and Practice of Physic; containing the Symptoms, Causes, Diagnosis, Prognosis, and Treatment of Diseases: accompanied by a Select Collection of Formulae,

with a Table of the Doses of all Medicines now in use. By ROBERT HOOPER, M.D., &c. New Edition, considerably enlarged and improved. (See our Review department.)

Ten Minutes' Advice on Coughs and Colds, with the Best Means of Prevention and Cure. 12mo. pp. 40. London: Renshaw and Rush.

An instructive popular view of the bad effects of cold on the body in producing various diseases, with good advice as to the best means of prevention.

The Edinburgh Medical and Surgical Journal, January, 1833. No. CXIV.

An Alphabet of Botany, for the Use of Beginners. By JAMES RENNIE, A.M., Professor of Zoology, King's College, London. 12mo. pp. 123. London, 1833. William Orr.

This is the second of a series of Alphabets now in course of publication, and is well executed. Among these we notice Medical Botany, Geology, Chemistry, Electricity, Zoology, Physics, and Meteorology, to which we direct the attention of our junior friends. The specimen before us is full of wood-cuts, and is, as its title imports, a work for beginners. We wish the undertaking success.

#### NOTICES TO CORRESPONDENTS.

*Crito.*—A flagellation richly deserved.

*Galen.*—We have fulfilled our promise;—we publish four pages of the Dictionary weekly.

*Curioso.*—The work is not sent us, or we should notice it. The publishers are among the short-sighted.

*Medicus.*—The Royal College of Physicians cannot confer the degree of M.D., but merely a license to practise, and the possessor of such is not entitled to the designation of Doctor.

*A Bartholomew Student.*—Our Correspondent must, or ought to be, aware that Mr. Earle requested his Clinical Lectures should not be published.

*Dr. Gordon Smith.*—We shall explain, by note, the reasons we decline inserting the letter. We think we act most wisely under all circumstances.

*Chirurgus* is anticipated.

*Dr. A. Thomson's* communications are under consideration.

*M. D.'s* Letter to Lord Melbourne on Cholera is too political for our pages. It is extremely well written, forcible, and conclusive, as to the humbug system of the defunct Board of Health.

*C.*—The article is libellous; and we have suffered quite enough already in defending the respectability of the profession.

*T.*—The surgeon who tells the patient of another that his doctor is killing him, and knows nothing of his complaint, and this in a public hospital, deserves to have his nose well pulled.

Amount of Subscriptions already received,  
in aid of Dr. Ryan . . . . . £172 19 6  
W. C. D. . . . . 0 10 0

# London Medical and Surgical Journal.

No. 49.

SATURDAY, JANUARY 5, 1833.

VOL. II.

## LECTURES

ON THE

## PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

Delivered at the University of London,

SESSION 1832—1833,

BY

PROFESSOR SAMUEL COOPER.

LECTURE XV., DELIVERED NOV. 5, 1832.

GENTLEMEN,

TOWARDS the end of the lecture on Thursday evening, I laid it down as a rule, that the surgeon should avoid interfering too officiously with the process established by nature for the separation of mortified parts. At the same opportunity, I advised you not to think of removing sloughs until they can be taken away without irritation of the living parts, or until their connexion with such parts is entirely destroyed. But there are two exceptions to this rule; one is, where a portion of a slough (for instance, one half of it) is completely loose, and the other half attached: the loose part of it may then be removed; for it is one important advantage to get rid of the fœtidness which it produces; and it is another to let the healing process commence in the part from which the loose portion of the slough is removed, sooner than would otherwise happen. Here, then, gentlemen, are two manifest benefits obtained by deviating from the general rule in this particular instance. But, you are not to think of forcibly pulling the slough away: you must cut it gently off with a pair of scissors, so as not to irritate the subjacent living parts. The other exception to the rule I have given you is where the mortification affects the whole thickness of a limb. Even in such a case, however, it is not always absolutely necessary to interfere with nature;

and, if the patient were to live long enough, she would, of herself, complete the separation. The soft parts would first separate down to the bone; the bony connexion itself would afterwards be destroyed by the slow process of exfoliation; and the ulcer finally heal.

But, gentlemen, this scheme of leaving the process of separation entirely to nature, when mortification affects the whole thickness of a limb, is rarely justifiable; for several weighty objections may be urged against it. First, the patient would not generally outlive all the irritation and long-continued profuse discharge, which would take place, nor the tedious confinement to which he would be subjected, ere the mortified part could be completely detached. But, gentlemen, supposing he were to outlive all this, the stump, left after the separation of the mortified parts, and the completion of cicatrization, would not be properly formed; it would not be calculated to bear pressure; it would have a conical sugar-loaf shape, with the bone ready to protrude again through the tender skin; in short, it would be an unserviceable one, always disposed to ulcerate afresh. For such reasons, amputation is frequently indispensable when mortification affects the whole thickness of a limb.

But, gentlemen, another important question now arises, and that is, respecting the precise time when amputation may be most advantageously done in cases of mortification. Some years ago, it was a maxim in surgery never to amputate till the mortification had stopped, and the red line of separation had been plainly established.

Now, gentlemen, I would wish you to remember, that this maxim should still be observed in all cases of mortification, arising from internal and constitutional causes. Here you have at once an unequivocal criterion for your guidance. If the mortification originates from an internal cause, you must wait till the red line is distinctly formed; that is, until the mortification has ceased to spread, and it is bounded by the adhesive inflammation. Sometimes, indeed, the operation may even be deferred a little beyond this period, if the patient

be in a very reduced state, and appears as if he would in all likelihood die ere the operation were finished. In such a case, you would probably think it right to wait a little before you amputate; because, under judicious management, the patient will sometimes rally. You would, in the hope of this amendment, give wine, cordials, tonic medicines, and light nourishment, and let him have the benefit of a well-ventilated, airy, quiet apartment. Then you would watch for the earliest opportunity of removing the mortified part with a better chance of saving the patient's life. In the mean time, you would cover the slough with a solution of the chloride of soda or lime, in order to render the air in the chamber less offensive, and less prejudicial to the patient's health. You might also sprinkle his linen with the same lotions, and wash his chamber with them. The more experience you have, gentlemen, the more you will be convinced of the truth, that *nothing is more conducive to the preservation of patients, afflicted with mortification, than the benefit of pure air and cleanliness.*

Gentlemen, the next thing, which I am anxious to fix in your memory, is, that this maxim of waiting for the establishment of the red line of separation, or, in other words, until there is a decided stop to the extension of the disorder, may, in some instances, be deviated from with infinite advantage. The wisdom of the rule is universally acknowledged in all cases of mortification produced by internal or constitutional causes; but if the rule were to be extended to certain other examples of mortification, we should frequently let the patient die, without giving him a fair chance of his life; he would perish, in many instances, before the progress of the disorder had stopped, or the red line of separation had been established.

We are under great obligations to Baron Larrey for the interesting facts and convincing arguments which he brought forward some years ago, in proof of the *propriety and expediency of deviating from the old maxim of waiting for the red line*, in certain cases, namely, in *traumatic gangrene, or the mortification following bad gun-shot injuries, compound fractures, and all other forms of external violence.* In such examples, it would be absurd to wait for the red line of separation, as the patient would almost always die before it had been formed:—he would die of the violent effects produced by the local disorder on his constitution—in some instances, in a very few hours. You will find, if I remember rightly, a case of traumatic gangrene recorded in Larrey's *Mém. de Chir. Militaire*, where the part, not having been removed, the patient died in six hours, without any attempt on the part of nature, at least, any successful attempt, to stop the progress of the mortification, or produce the red line of separation.

But, gentlemen, *if you amputate thus early, it must be in a sound part of the limb, suffi-*

*ently distant from the seat of the gangrene.* By so doing, you will give the patient by far the best chance of recovery. I have recommended immediate amputation in several cases of traumatic gangrene in which I have been consulted; and, in the army, I had many opportunities of performing the operation under such circumstances, and generally with success; especially at Brussels, after the battle of Waterloo, where I amputated several gangrenous limbs, although the mortification had not ceased to spread. A few years ago, I was called to a master glazier, in the Colonnade, Russell-square, who, in consequence of a fall from a ladder, met with a compound fracture of the humerus, extending into the elbow-joint. On account of the rapid mortification which seized the arm, it was impossible to save the limb; and the question was, whether we should wait for the line of separation or not! I advised amputation without delay; in fact, when I was called in, the cellular membrane, nearly to the shoulder, was full of serum, and quite œdematous—there was even crepitation on pressure, from air in the cellular tissue. I, therefore, recommended that amputation should be performed at the shoulder-joint, which was accordingly done, although, at the time, the mortification was spreading rapidly, and the patient's intellects were becoming deranged.

You will find, gentlemen, that, in traumatic gangrene, an early tendency to coma and confusion of the mental faculties usually presents itself; a complication, which seriously lessens the chances of the patient's life being saved by any kind of proceeding. In the case which I am quoting, the stump healed favourably, and every thing went on well for about six weeks; at the expiration of which, there was merely a small fistulous opening left, and no doubt was entertained that the patient would recover in another week. But at the period specified, an abscess formed near the scapula, and, in the patient's reduced condition, ultimately proved fatal. Now, notwithstanding the issue was not such as circumstances promised, the case may be considered as one strongly in favour of early amputation in traumatic gangrene; for certainly, if this man's arm had not been amputated, he would not have lived twelve hours from the time of my being called in. What was the exact cause of the abscess is not clear; perhaps it would not have formed at all, if amputation had been had recourse to a little sooner, that is, before the upper part of the arm had become swollen and œdematous. I do not presume, however, to account for the abscess: you do find abscesses sometimes following severe operations, in parts more or less distant from the wound, from causes which are particularly obscure.

Gentlemen, I now request your attention to another case, forming an exception to the ordinary rule, that we should wait for the red line of separation before we amputate: the case, to which I allude, is that in which a *mortification of the foot takes place from in-*

jury of the femoral artery by a musket ball, or any other kind of wound. If, then, the femoral artery be wounded by a bullet, and mortification of the foot commence, the wisest plan is to amputate without delay, and, if you omit to do so, the patient will be lost. In such a case, it is necessary also to amputate, at least as high as the wound in the femoral artery.

Gentlemen, I have yet another case to bring before you, as constituting an exception to the old rule: that is, *where mortification arises in consequence of obstruction of the circulation by an aneurism, or the operation for its cure.* If you allow an aneurism to go on beyond a certain stage, the sac will sometimes give way under the integuments, or at a considerable depth below them; the pulsation in the tumour will then cease, and the blood be copiously extravasated in the cellular substance. Under these circumstances, the limb will frequently mortify, such is the obstruction of the circulation produced by the extensive effusion of blood in the cellular tissue. Sometimes after the operation of tying an artery for aneurism, for example, the femoral, on account of a popliteal aneurism, mortification will ensue from obstruction of the circulation; but this occurs less frequently now than formerly, because the surgeons of the present day understand much better, than their ancestors, a proper principles on which arteries ought to be secured in cases of aneurism. However, notwithstanding this advantage, mortification will now and then occur. In one of the last volumes of the *Medico-Chirurgical Transactions*, I recorded an instance, where, in consequence of the patient choosing to wait a few days before he would submit to the operation for popliteal aneurism, he lost his limb; because, before he was ready, the sac gave way under the upper part of the gastrocnemius muscle, and blood was effused in surprising quantity in the cellular membrane down to the heel. In fact, the whole of that texture in the limb was completely gorged with blood. The pulsation in the tumour ceased; but the real cause of this change was not at first comprehended. Mr. Lawrence, who was likewise consulted, thought he heard a jet of blood into the sac; I secured the femoral artery, but it was of no avail; the limb was attacked with mortification, and prompt amputation became indispensable, though the mortification was rapidly extending itself. I took off the limb just below the ligature on the artery. The patient soon recovered. The cause of the cessation of pulsation and of the other symptoms was now quite clear; the sac of the aneurism had burst, and the limb was loaded with extravasated blood; the consequence of which was such a stoppage of the circulation as led to mortification. In *this description of mortification*, then, namely, *in the case produced by stoppage of the circulation in consequence of aneurism, or the operation for its cure, you should not wait for the red line of separation before you amputate.*

I come now, gentlemen, to the *third indi-*

*cation* in the treatment of mortification, namely, *that of healing the ulcer; or, in the event of amputation, the wound, resulting from the separation of the mortified parts.* I need merely specify this indication at present, because it can be more conveniently taken into consideration with the subjects of ulcers, wounds, and the manner of dressing stumps.

Gentlemen, a few other varieties of mortification still claim your notice: namely, *such as are produced by internal causes.* Almost all the remarks, which I have hitherto made, refer to that kind of mortification which results from acute inflammation, excited by external injuries. The other forms of the disorder, of which I am now to speak, proceed entirely from internal causes, such as debility, advanced age, an impaired state of constitution, disease of the heart, or of the commencement of the aorta, or from ossification of the arteries. These examples are sometimes termed *chronic mortifications*, as they are generally slower in their progress, and not preceded by acute inflammation: they are also illustrations of that variety of mortification which is called *dry gangrene*, of which the *gangræna senilis* is a remarkable specimen. It is not yet completely settled whether ossification of the arteries should be viewed as a cause of this kind of mortification: in the parts, to which ossified arteries are distributed, we find nutrition generally going on very well; it might, therefore, be argued, that, as this form of mortification, in its variety of *gangræna senilis*, occurs in elderly people, who, whether they have mortification or not, have mostly ossification of some of their arteries; this condition of the blood-vessels may only be an accidental coincidence, and not the actual cause of mortification, when it does occur. I believe, gentlemen, that the right view of the matter is this: an ossified state of the arteries must *predispose* to mortification, and when this state of the arteries is joined with impaired health, or accidental weakness of circulation, chronic mortification will be the result. In a large proportion of cases of dry gangrene, we find ossification of the arteries present; for instance, when the foot is affected, the femoral artery is often found completely ossified. Hence, it is the common rule in such cases, to examine the condition of that vessel. I repeat, that, in my opinion, the right view of the case is to consider ossification of the arteries merely as a predisposing cause, or one which will facilitate the occurrence of chronic mortification, when any exciting cause comes into operation. We can hardly suppose an ossified artery to be as well qualified to perform its functions as one retaining its natural, flexible, and elastic state.

Gentlemen, the variety of *chronic mortification*, or of *dry gangrene*, called *gangræna senilis*, is completely different from that species of mortification which is brought on by acute inflammation, or external causes; it is more insidious in its progress and less threatening in its first symptoms, though not less fatal in its ter-

mination. It is peculiar in not being preceded by any inflammatory condition of the part, except a slight discoloration, and a greater or less degree of pain. It frequently occurs at the very extremity of the body, mostly on the inside of one of the small toes. The part is at first of a pale red, or livid colour, and is affected with a sensation of burning heat. The disorder mostly begins, as I have already stated, at the greatest distance from the centre of the circulation. I have never seen an instance of it on the hands; it attacks the foot, beginning upon one of the small toes, and soon spreading to the foot and ankle; but there is some diversity in this respect, for its progress is sometimes slow, and it may be a week or two before it reaches the leg. There is also a difference with respect to the accompanying constitutional symptoms; sometimes the patient is troubled, in the earliest stage of the disease, with severe irritative fever, or, at least, a constitutional disturbance, corresponding, in all material points, to that affection; there is a rapid, feeble, irregular pulse, with considerable disturbance of the nervous system; a brown tongue; extreme prostration of strength; vomiting; clammy sweats; hiccough, and delirium in the first period of the case; and, under such circumstances, the patient almost always soon sinks. In most instances, however, there is less constitutional disturbance in the commencement, and the patient is surprised that his case should be so serious as you tell him it is. Perhaps there is merely a slight discoloration on one of his toes, attended with a trifling degree of pain; and you will find some difficulty in persuading him, that this apparently slight affection will endanger his life. These circumstances were well illustrated in the case of a gentleman in Gray's Inn, whom I attended about two years ago, along with Sir Astley Cooper, and Mr. Hughes of Holborn. This instance was also remarkable, as affording an illustration of chronic mortification in both feet at once, the only case of the kind which I have ever seen; in fact, it is of very rare occurrence. Now, this gentleman's stomach was so little affected, and the constitutional disturbance so moderate, that he used to eat a mutton chop for his dinner, and digest it very well every day, till within about three days of his death, and he lived under the disease about five weeks. This was the case notwithstanding both legs were affected. His pulse was usually between 100 and 110, rising occasionally, however, to 130, and his intellects were clear until within a very short period of his death. Another remarkable circumstance in this case was, that the mortification never extended itself without being preceded by violent pain. Hence we could always foretel, by the violence of the pain, how far the mortification would next extend itself. The attack of burning pain seemed to precede every other change. It was curious also to observe, that the process of mortification was different in each foot: in the left leg, it began

on the inside of one of the small toes in the ordinary way; but, on the right one, it began with a diminution of temperature in the foot, which proceeded gradually to the leg. There was no detachment of the cuticle, merely a slight discoloration, followed by a loss of sensibility, and a gradual cessation of the circulation and every vital action. The appearance of the limb was, on the whole, but little different from that of a dead subject, excepting that it was somewhat shrunk and trivially discoloured. The process of mortification in the other limb was such as is commonly seen.

Gentlemen, gangræna senilis is a case, in which opium is found more serviceable than bark. Pott insists much on the use of opium; but he rather overrates its value, for he endeavours to make us believe, that it is a specific for this species of dry gangrene—at least, for stopping its progress. Of all medicines, opium is perhaps the most serviceable in this disease; but it is far from being a specific. When you prescribe it in chronic mortification, you should do it on the plan I mentioned to you on a former occasion, namely, you should keep the patient continually under its influence, by repeating the doses every four or six hours. Other medicines are occasionally employed, but none in which so much confidence can be placed. In the case of the gentleman just referred to, several other remedies were tried, such as the sulphate of quinine, diluted sulphuric acid, subcarbonate of ammonia, and also musk, yet none of them seemed to do any good: opium was the most useful; yet, in some schools, the subcarbonate of ammonia is particularly recommended in almost every example of mortification. I do not think it is to be so much depended on as opium: however, you may give it along with opium, when the patient requires powerful stimulants; or you may give the patient wine and cordials, for the disease is connected with debility, the vital powers being often in a state of extraordinary depression; and these remedies are calculated to support the various actions of the system.

With regard to local treatment, emollient poultices and fomentation receive the greatest share of approbation, and are most frequently employed; but other applications are occasionally used, especially the solutions of the chlorides of soda and lime, and the nitric acid lotion, consisting of ℥j. of nitric acid in a pint of distilled water. I have tried various applications, such as the nitric acid lotion, and camphorated mixture, with chloride of soda or of lime in it, or with opium or nitric acid in it. As I have often remarked, the chlorides of soda and lime are merely disinfecting agents; they lessen the foetid smell of the mortified parts; but they cannot be recommended for any efficacy in alleviating the patient's sufferings, nor for any specific power in stopping the extension of the disorder.

Gangræna senilis is generally fatal; the red line of separation, indicating the stoppage of the disorder, being very seldom formed

before the patient is too far reduced to have much chance of recovery. I believe that nine patients out of ten, affected with chronic mortification of the feet, fall victims to it. I am anxious to remind you, that this form of mortification always proceeds from internal causes, and consequently that you must always wait for the formation of the red line of separation, before you think of practising amputation.

Gentlemen, *another species of mortification*, frequently observed, is that which comes on in persons who have been long confined to bed by typhoid diseases, compound fractures, or paralytic diseases, or any disease which renders long confinement in one posture unavoidable, and seriously reduces the patient's strength. In such classes of patients, we find that those parts of the body, which are most prominent, and most exposed to pressure from the bedding, become affected with mortification, as the skin over the sacrum and spinous processes of the vertebrae; or, if the patient has lain on his side, the integuments over the great trochanter, or the crista of the os ilium. Perhaps, this form of mortification is one that you will more frequently have to deal with in practice, than any other; and it is much more common than the gangrena senilis. The cause producing it is of a compound nature: first, the pressure on the part; and secondly, the weak reduced state of the circulation and constitution. The mortification would never attack a healthy person in consequence of his lying in bed. The predisposing cause is general weakness, languor of the circulation; the exciting cause is pressure on the part by the bedding during this debilitated state of the constitution. There must, therefore, be two indications in the treatment:—*first, to remove the pressure from the parts already affected, or threatened with the disease*, by altering the position of the patient, and the judicious arrangement of pillows, or by laying the patient on Dr. Arnott's hydrostatic bed. Secondly, *to endeavour to improve the patient's health*, because the stronger he becomes, the less liable will he be to the disease in question, and to its extension. Local applications, it must be confessed, are not very efficient, the reason of which is that the disease is intimately connected with the state of the constitution. However, some advantage may be derived from them, especially in the early stage. The most common application is some spirituous or astringent lotion, such as camphorated spirit, or lotions containing liquor plumbi acetatis. Sometimes also the parts are protected with the application of adhesive plaster, or soap plaster; but, after the mortification has attained some considerable degree, local applications are very inefficient. Surgeons employ camphorated spirit, emollient poultices, or solutions of the chloride of soda or lime. You may often prevent the disease from coming on by washing the threatened part with spirituous and astringent lotions, and changing the pa-

tient's posture slightly from time to time. By these means, many persons might be preserved from this species of mortification, which frequently proves fatal, after the patient has got over the worst stages of compound fractures, fevers, and other original complaints.

The next subject, gentlemen, to which I entreat your attention, is *hospital gangrene*. This affection is very different from every other form of mortification, so that doubts exist whether it ought to be arranged with mortification or ulceration; in fact, it is not precisely like either of them, but seems to be in some measure compounded of both. It differs from common mortification, not only in its appearance and the manner of its occurrence, but also in its mode of treatment. It is characterized, according to common belief, by being contagious. All the best-informed army surgeons concur, I believe, in this opinion. It is remarkable for its disposition to attack wounds and ulcers in hospitals crowded with such cases, and it is therefore more frequently observed in military hospitals than civil ones. In this disease, the soft parts are not converted into a firm, distinct slough, as in ordinary mortification, but into a putrid, glutinous, or pulpy substance. On this account, it is often classed with ulcers, and sometimes called the *hospital sore*. It is so called, I think, by Mr. John Bell, in his *Principles of Surgery*. It certainly has a close resemblance to the worst forms of gangrenous phagedæna, and especially to that species of phagedæna, which is observed in the foul or venereal wards of some of our metropolitan hospitals. Mr. R. Welbank thinks, that the two diseases are essentially the same in all their most important features. Some time ago, I saw a child, in a filthy cottage near town, with half its head destroyed by a kind of phagedæna, not materially different from hospital gangrene. Since that time I have met with several instances among the lower Irish, who come very much for surgical assistance to the Bloomsbury Dispensary; and it was only last winter that I saw a foul kind of ulceration that had begun on the lip of a young person, and destroyed nearly all the face. In this case, I could see little difference between the disease and hospital gangrene.

LECTURE XVI., DELIVERED NOV. 7, 1832.

GENTLEMEN,

In the lecture on Monday evening I described the ravages, which frequently take place in persons who have been long confined to bed, and which are brought on by sloughing of the parts over the sacrum, trochanters, crista of the ilium, and other prominences, particularly pressed upon by the bedding. Among the means for preventing the coming on of this form of disease, I ought to have mentioned more particularly the *hydrostatic bed*, the invention of Dr. Arnott; it consists of a kind of trough, capable of holding water to the depth of

about six inches, which is covered with a cloth, rendered water-proof with a coating of elastic gum, or some other sort of varnish. By lying on a bed constructed on this principle, the patient floats upon water without touching it. The reports, given me of this hydrostatic bed, are so favourable that I think it merits your attention, as a means that promises to be of great utility in preventing and stopping the mortification arising, in debilitated persons, from the pressure of the bedding. Yesterday evening I was in company with Mr. Lawrence, who informed me, that the hydrostatic bed is now employed at St. Bartholomew's Hospital, and that one of his own patients, with some disease or injury of the spine, is receiving great benefit from it. When the patient was first put upon it, the sloughing had reached a considerable extent, but there has been subsequently no further extension of the disease, and much comfort is experienced. The water makes a more equable and less injurious pressure, than any thing else that can be imagined. Common pillows are not so well calculated to afford relief; for however well they may be arranged, you cannot always hinder them from pressing unequally, or make the patient's posture agreeable to his own feelings. But, with the hydrostatic bed, all partial pressure is avoided, for the patient lies on water itself. This valuable invention, I am told, has been introduced into several of the hospitals, and been generally approved of.

When I stopped on Monday evening, I was in the middle of the subject of hospital gangrene. True hospital gangrene appears to be communicable from one person to another, by the application of the discharge from the parts affected to an abraded or ulcerated surface in another individual. This mode of propagation is not restricted to the kind of phagedæna called hospital gangrene, as seen in military hospitals; we have examples of it in the *phagedæna* that is occasionally seen in the foul wards of the London Hospitals. We know that such phagedænic disease has been communicated from one person to another by the employment of sponges, which had been used in wiping away the matter from patients labouring under the disorder. Mr. Welbank, in his essay upon the subject, in the *Medical and Chirurgial Transactions*, mentions several facts of this kind, tending to establish the identity of hospital gangrene with gangrenous phagedæna.

When hospital gangrene begins on an abraded surface, one or more vesicles first appear at the edge of it, and are soon converted into dirty white, or greyish sloughs; but, if they happen to contain a dark fluid, they burst and pour out a thin coagulum of a dirty brown colour; the part becomes at the same time acutely painful, and is rapidly converted into an extensive slough. This slough, as I have already mentioned, is not like that produced by ordinary mortification, but is a glutinous pulpy mass; hence Gerson, a French

surgeon, who has written a treatise on this disease, proposes to name it *pulpy gangrene*. When the slough comes away, the subjacent surface generally presents a healthy granulating appearance; but this favourable look continues only a short time, for the same destructive processes recur on the new surface, the same mischief is produced, and in a still more formidable degree.

When hospital gangrene attacks a wound, or ulcer, the part first becomes painful; a viscid light-coloured substance exudes from the surface of the granulations, which lose their red colour, and exhibit a number of spots of a greyish, or dirty white, colour, like aphthæ; these spots unite together, and entirely change the look of the whole wound or sore. One peculiarity of this form of disease is, that it is much disposed to hæmorrhage, an accident, to which the common forms of mortification are not very subject, on account of the vessels being blocked up with coagulum. But, in hospital gangrene, the bleeding is often so profuse, that it has a great share in accelerating the patient's death. After the whole surface of the ulcer, or wound, has changed in the way which I have described, you will see a red, or purplish, oedematous circle next formed in the surrounding skin, the edges of the disease becoming hardened and everted, and the sloughs, such as they are, resembling the fetal brain in a state of putridity, more than any thing else, perhaps, to which they might be compared. Hospital gangrene spares hardly any textures. Amongst the severe cases seen in Spain by Mr. Blackadder, there was one, in which one-half of the cranium was exposed, and as black as charcoal. In another instance, the large arteries and nerves of both thighs were exposed and dissected, the integuments and cellular membrane being annihilated, with the exception of a narrow strip of skin on the outside of the limb. In other examples, which the same gentleman saw in the hospitals of the British army in Spain, the large joints were extensively opened; and in one particular case, the skin, cellular substance, and fascia of the whole neck, were totally destroyed.

In the advanced stages of hospital gangrene, hæmorrhage usually comes on, which it is exceedingly difficult to stop, for the ligature invariably fails, and there is no coagulum formed in the vessels, and no healing process established for the permanent closure of them; the ligature, in fact, cuts its way through the arteries, which are already in a half destroyed or diseased state. In the advanced stages of the disease, the pulse is rapid and feeble; the tongue covered with a brown or black fur; but there is not usually much delirium, even to the end of the disease. In the early stages, the pulse is fuller and not so frequent, and the tongue white. In many cases, the lymphatics, proceeding from the part, are inflamed, and the absorbent glands swelled.

With respect to the *prognosis in hospital*

*gangrene*, all surgeons agree, that the disease is one of the most dangerous complications to which wounds and ulcers are liable. Slight cases sometimes admit of cure, and have even got well of themselves; but after the disorder has made some progress, it very frequently proves fatal. From histories of this disease, it appears that, after a person has recovered from a first attack, he will often have a second and a third, until, in this manner, he is carried off. In the cases recorded by Mr. Blackadder, there were several such relapses; and sometimes the patient, after having apparently struggled through various distinct repetitions of this formidable complaint, at length fell a victim to the sixth, or seventh attack.

The *exciting cause of hospital gangrene* is generally considered to be an infection generated in crowded hospitals, especially in those which are full of patients afflicted with wounds and ulcers. Hence the disease is principally met with in military hospitals. It is observed too, that its origin and progress are considerably promoted by the situation of such hospitals, and by the state of the weather; thus, if the hospital be in a low, marshy situation, and the weather be hot, the disease will be more likely to originate, and its progress be more rapid and destructive.

Now, gentlemen, although all surgeons, who have had opportunities of studying this peculiar disorder, agree that it is infectious, yet no doubt can exist about its extension being often materially influenced by the continued operation of the causes which gave rise to it in the patient or patients first affected. If you were not to take this view of things, there would, I think, be considerable difficulty in accounting for the commencement of the disease at all, because it cannot have begun by infection; it must have had a beginning from some other source; but, when once generated, it may then, indeed, partly spread by infection. The state of the atmosphere in some military hospitals is, no doubt, prejudicially influenced by localities, as well as by the effluvia from the numerous ulcers and wounds in them; and this, I conclude, is the cause of the origin of the first cases which show themselves in such a place. I am also of opinion, that these causes, or any others, whatever they may be, which produce the first cases in a particular hospital, must have some considerable share in extending and keeping up the disease afterwards: all is not to be referred to infection, transmitted direct from one patient to another.

No medicines can be depended upon for checking this formidable disease; in fact, internal remedies of various kinds have been employed with very little benefit. Bleeding, purgatives, emetics, bark, and acids, such as the citric acid, and the diluted sulphuric acid, have all been most fairly tried, and you may infer, from the tenor of the account given of their effects, that none of these things are to be depended upon. Acids are deemed, however,

beneficial, in a certain degree, when no diarrhoea is present; but bark has little power of checking the progress of the disease, if it can be said to possess any influence at all. Opium is useful, and the agony of the patient is so great that it cannot be dispensed with; perhaps, it is the most valuable of all the internal remedies which are administered in this disease. Some practitioners are advocates for venesection in the commencement of the disorder; but one objection to the use of the lancet, is, that the puncture is liable to be attacked with the disease. Even the bites of leeches are subject to the same formidable change, so that many surgeons are afraid of taking away blood in either manner. During the last war, the French had a great deal of this disease in their military establishments; the practice then preferred was the actual cautery, and, I believe, that it is still sometimes resorted to in France, for the cure of hospital gangrene, although many surgeons of that country appear now to place much reliance on the chlorides of soda and of lime, as means of stopping this dreadful disease. Lisfranc, of Paris, speaks highly of these remedies; indeed he is so confident of their power in hospital gangrene, that he is reported to have observed to his pupils, that the ravages of this disease would never again occur to the extent formerly witnessed. If Lisfranc's assertion be true, namely, that the chlorides of soda and lime are so efficient in hospital gangrene, it is an argument against the identity of that disease with gangrenous phagedæna, because I have repeatedly tried these remedies in the latter disorder, and found that they frequently fail; they correct, indeed, the disagreeable smell proceeding from the sloughs, but they are nearly powerless in stopping the progress of the mischief. Hence, if they are as serviceable in hospital gangrene as Lisfranc represents, phagedæna cannot be the same disease. Hospital gangrene does not frequently occur in the hospitals of this country; we do meet with cases of gangrenous phagedæna; but if this disease and hospital gangrene were of the same identical nature, they ought to be equally common and curable by the same means.

The application employed by Mr. Blackadder, with some degree of success, was the liquor arsenicalis, diluted with an equal quantity of water; lint was dipped in it, laid on the parts affected, and renewed every quarter of an hour, or half hour. After the separation of the sloughs, gently stimulating, or astringent ointments were applied. This plan was found to succeed more frequently than any other. So free a use of arsenic, I may remark, we could not venture upon in common diseases, because when preparations of this metal are put on a wounded, ulcerated, or abraded surface they are liable to be absorbed into the system, and poison the patient just as effectually as if they had been introduced into the stomach. Of late years, the undiluted nitric acid has been tried in gangrenous phagedæna with consider-



able efficiency. Mr. R. Welbank, who inserted some valuable observations on this subject in the *Transactions of the Medical and Chirurgical Society of London*, speaks highly of this application. I will give you an account of his manner of employing it when I arrive at the consideration of phagedæna, for which disease he particularly recommends it, and which, you know, he considers to be identically the same affection as hospital gangrene; a point, perhaps, not yet completely determined.

Gentlemen, the next elementary subject, to which I request your attention, is *ulceration* and *ulcers*. Before you enter into the consideration of sores in general, you ought to have some correct idea of what the term *ulceration* really means. It may be defined to be that process, by which all kinds of ulcers or sores are formed; and I may say also, that it appears to be an operation, in which the lymphatics are more actively concerned, than the blood-vessels. With respect to an *ulcer*, it is a chasm on some internal or external surface of the body, produced by the removal of some of the substance of that surface back into the system: the absorbents seeming as if they removed the particles of the body more quickly, than they are deposited again by the secreting arteries. The process of ulceration is totally different from erosion, and from any decomposition of the animal solids, brought on by the agency of chemical means. It might be supposed, that the pus had some effect in dissolving parts, and thus contributing to the process of ulceration: but this view is totally destitute of probability; and, as far as I can judge, it is refuted by the fact, that, when ulceration is going on most rapidly, there is the smallest quantity of pus, and when the process of ulceration has stopped, and the parts are healing, then it is most abundant. We must, therefore, I believe, reject the notion that ulceration is in any manner connected with, or dependent upon, a solvent power of pus; indeed, we know, that there is nothing eroding in the qualities of common pus. Some surgeons offer, what they choose to call, a physiological explanation of the process of ulceration; but their account is substantially the same as what I have delivered, though worded differently; thus, when they say, that, in ulceration, the nutrition of the part ceases, while the destructive function of absorption goes on uninterruptedly, or even with greater activity than usual, we are merely told, that the old particles of the textures affected are taken up by the absorbents more rapidly, than new particles are supplied by the secreting arteries; the same meaning, as that attached to my description, is expressed in different terms.

While ulceration is going on, then, it seems as if the capillary secreting arteries had lost their power of regularly depositing new matter in the textures attacked, but the absorbents still continue their particular functions, and probably with more rapidity than under ordinary

circumstances, or with some modification, or irregularity, not yet accurately made out.

Gentlemen, it is curious to observe, not only the blood-vessels absorbed by the process of ulceration, but also the lymphatics themselves,—those vessels which are so busy in demolishing other parts, actually destroy themselves, or, at least, are supposed to do so. Now, there are certain limits, beyond which nature will not suffer us to advance in the detection of her secrets; she will not allow us to go further into the proximate cause of ulceration than what I have explained to you; yet, perhaps, indeed, not quite so far. We only infer that the lymphatic vessels absorb themselves, because we know of no other mode of accounting for their removal; and it may be entirely an hypothesis; and when we express a difficulty in understanding how one part of the body can remove or destroy itself, that difficulty is not at all lessened by any reference to another phenomenon, equally inexplicable. Thus, when we say, that it is as easy to conceive that a part can destroy itself, as that parts can form themselves, the difficulty of comprehending the first is not at all removed; we are only told, that there is another fact in physiology equally difficult to understand. So much for the ingenious and original manner, in which John Hunter used to reason with those, who had difficulty in acceding to his ideas of the wonderful power and activity of the absorbent system.

All parts are not equally prone to ulceration: muscles, fasciæ, large blood-vessels, and nerves, make great resistance to the process; they hold out longer than the generality of textures, and, in particular, they are less disposed to ulcerate, than the cellular substance and mucous membranes. We find illustrations of this fact when pus is making its way to the surface of the body by *progressive absorption*, as John Hunter called it, for the purulent fluid will not pass through a muscle, when it meets with one, but makes its way through the cellular substance to the skin, sometimes very circuitously. Again, if it encounter a fascia, it will not quickly pass through it, but its progress to the surface will be considerably retarded, and when a passage is at length made for it, through such fascia, it is generally by the part having sloughed, and not by ulceration.

Gentlemen, you should understand, that abscesses proceed to the surface, not altogether by the process of ulceration, but there is a kind of *interstitial absorption*, as John Hunter called it, of the textures between the cyst and the skin; the cyst thus approaches the surface, and, when within a certain distance of the surface, ulceration takes place within it, and on that side of it which is nearest to the skin. It is by the advance of the ulceration, thus begun, that the matter is finally brought immediately under the cuticle, and discharged. The process, by which foreign bodies and tumours approach the surface, is also different from that of common ulceration, no supuration attending it, until such bodies, or tumours, have

almost made their way through the skin, when such suppuration and ulceration, or even sloughing, will often take place. The term, which John Hunter used to apply to some part of the process was *progressive absorption*; certainly not a very good term, for it does not immediately convey to us the meaning which he affixed to it; in truth, all absorption is *progressive*, but what he meant to express was, that the parts of the body are gradually removed in such manner and direction as allowed the foreign body, or tumour, to advance progressively to the surface, or in some other particular course, as needles do, from the place which they enter, to very remote situations. The phrase, I think, is not well chosen.

Every surgeon of experience must have had opportunities of noticing the denudation of arteries by ulceration; large arteries will frequently lie in the midst of an ulcer, beating a long while before our eyes, without being opened by the ulcerative process. I have often seen the femoral and brachial arteries exposed, to the extent of several inches, yet there was no hæmorrhage. The fact proves the power of large arteries to resist the attack of ulceration on themselves; and a good reason may be discerned for this disposition of things, the immediate preservation of life sometimes depending upon the capability of a great artery to withstand ulceration, and not readily to give way, and let a fatal hæmorrhage occur.

When we find ulceration of large arteries taking place, it is mostly in phagedænic ulceration, and, especially, in hospital gangrene, which is, at all events, analogous to phagedænic ulceration, and something, as it were, between ordinary mortification and ulceration, as I have already remarked. Occasionally, gentlemen, you may see phagedænic ulceration opening large arteries, as the case, from which the preparation which I now hand to you was taken, sufficiently proves. It is the external iliac artery, which it was necessary to tie, in order to stop a profuse hæmorrhage that had taken place, in consequence of ulceration of the femoral artery, in a phagedænic disease of the groin. This patient died from mortification of the limb; but the fact is sufficient to convince you, that phagedænic ulceration will sometimes open large arteries. Perhaps, in the case now quoted, the operation was not so likely to succeed as it would have been if the artery had been tied for common aneurism, because the patient's system must have been sadly reduced by the phagedænic ulceration, and the circulation, no doubt, in a feeble, languid state.

In former times, when patients were crammed with mercury, in unmerciful quantities, for the cure of venereal diseases, it was much more common to see phagedænic ulceration than now; but, notwithstanding the diminished frequency of this terrible form of disease, we sometimes meet with instances of arteries being opened by the ravages of ulceration around them; and, I believe, that whenever you do

observe the fact, it is generally from ulceration of the phagedænic character.

Gentlemen, I defined an ulcer to be a chasm, produced on some internal or external surface of the body by the process of ulceration; and I explained, that the absorbents are more actively concerned in such process than the blood-vessels. Now, we conclude, that the absorbents are principal agents in this destructive operation, from several circumstances. Thus, in particular states of the constitution, in persons with the scars of old wounds, or sores, or bones which were formerly broken, but have long been united again, you will find these scars will be absorbed, and the ulcers reproduced, while the bones, which have been for many years united, will become again disunited from absorption of the callus.

A remarkable instance of these curious facts is recorded in the History of Lord Anson's Voyage round the World. In consequence of the fatigue and privations which his crew were compelled to undergo in doubling Cape Horn, in a boisterous season of the year, most of them were seized with the scurvy. In this condition of their health, those who had scars, became again afflicted with ulcers in the situation of them; and those who had formerly had broken bones, found those bones become again disunited, and their fractures reproduced. Facts of this kind prove, that the absorbents are intimately concerned in the process of ulceration; and they also prove the truth of John Hunter's doctrine, namely, that all new-formed parts, such as cicatrices and callus, are weaker than the original parts of our frame, cannot bear disease so well, and are particularly liable to ulceration and sloughing.

Then, gentlemen, with regard to the symptoms of the different forms of ulceration, this process is generally preceded by more or less pain, heat, redness, and swelling of the part; in short, by the common effects of inflammation. The cuticle is next loosened, and perhaps one or more vesicles arise, under which little excavations are formed, and, by uniting together, constitute the beginning of the chasm. As long as no attempt at reparation is made, the excavation proceeds, and forms a larger and larger chasm, and the edges of the ulcer are sharp and jagged. In this stage, the surface of the sore is of a dirty yellow colour, with shreds of animal matter upon it, indicating that the whole of the textures is probably not absorbed. It seems as if some of them were really converted into these shreds of disorganized substance. While ulceration is proceeding, or the chasm is enlarging, there is a discharge of a thin ichorous fluid, frequently tinged with blood; and the margin of the surrounding skin is sharp, abrupt, reddish, tender, and painful; but, as soon as the sore has a disposition to heal, all these appearances are changed.

Gentlemen, you will have no difficulty in giving a definition of an *ulcer*, if you restrict the meaning of the word to a *chasm produced*

by ulceration on some internal or external surface of the body. To form a conception of what a sore strictly is, then, is easy enough; but many cases are called *ulcers* where no loss of substance has taken place, and where the disease is not truly produced by the process I have mentioned. Thus, after a simple incised wound, the two opposite surfaces of the injury not having united by adhesion, they suppurate and granulate, and, if the part remains unhealed for a considerable time, the case is often regarded as an ulcer; but there is no loss of substance, and the parts are merely divided. When, in consequence of mortification, a chasm is formed, the furrow which is formed between the dead and living parts, is certainly caused by a process similar to ulceration, and the separation of the slough is no doubt accomplished by the same kind of operation; therefore, I think that, in this instance, no dispute can be entertained about the propriety of calling the remaining chasm an ulcer. The same conclusions may be drawn when an abscess bursts: the process of ulceration, commencing in that part of the cyst nearest the skin, is concerned in bringing the matter to the surface; in other words, an *open abscess* may be called an *ulcer*, because its present state has been preceded by *ulceration*.

Then, gentlemen, the causes, most frequently producing ulceration, are abscesses, which have burst of themselves or been opened; wounds which have not healed by the first intention, and have been long uncured; pressure in various forms, as that of chains on prisoners, badly fitting harness on horses, insufficiently lined splints on fractured limbs; external irritation, of divers kinds; varicose veins in the lower extremities, producing, as it appears, an obstruction of the capillary circulation, and thence a disposition to chronic inflammation, followed by sores difficult to heal, on account of the peculiar condition of the circulation; and, lastly, I may enumerate as frequent causes of ulceration, specific diseases, and diseases of bones and ligaments. Gentlemen, we will resume this subject to-morrow evening.

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## CLINICAL LECTURES

AT THE

MEATH HOSPITAL, OR COUNTY OF  
DUBLIN INFIRMARY,

DELIVERED BY

DR. GRAVES, M.R.I.A.,

King's Professor of the Institutes of Medicine in the School of Physic, Dublin.

(Corrected by himself.)

SESSION 1832-33.—LECTURE IV.

HÆMOPTYSIS—PULMONARY APOPLEXY—  
PHthisis—TREATMENT OF HÆMOPTYSIS.

GENTLEMEN,

HAVING hitherto dwelt chiefly on the general pathology of hæmoptysis, I shall this day make

some additional observations on the causes of this disease, and then proceed to the treatment, without entering into an accurate description of the particular symptoms, which you will find sufficiently detailed in the works of Mason Good, Laennec, Mcintosh, and in the excellent article "Hæmoptysis," in the *Cyclopaedia of Practical Medicine*, by Dr. Law, and the valuable essay of Dr. Townsend on pulmonary apoplexy. You recollect, I differed from Dr. Law, with respect to the source from which the blood is derived in bronchial hæmorrhage. Dr. Law is of opinion, that any thing which produces engorgement of the system of the pulmonary artery, occasions hæmorrhage from the bronchial tubes; but this, for the reasons before stated to you, is impossible. I have also endeavoured to explain to you the manner in which pulmonary apoplexy may be followed by extensive disease of the lung, interstitial suppuration, and death; or, on the other hand, how a coagulium may be formed in the substance of the lung, and the person affected remain in a state of perfect health. I have proved, from dissections, that after the lung has been solidified, in consequence of pulmonary engorgement, it may remain in that condition for years, or if a scrofulous diathesis exists, how such an occurrence may be followed by tubercular consumption. I have mentioned that kind of consumption supervening on effusion into the cellular tissue of the lung, where there is extensive interstitial suppuration, and not a single tubercle can be discovered. You will recollect that I stated, that I could adduce instances, in which pulmonary effusion took place, and the clot remained in the cellular substance without producing any irritation, and that on dissecting such lungs, I found those organs perfectly sound up to the limits of the clot, and this in cases where the effusion had existed for several months\*. Now if this remained in the substance of the lung, as a harmless body, for so long a space of time, I cannot conceive how a similar effusion could in any case become a stimulant. I differ also from those who think that the effused blood may become corrupted and a cause of gangrene.

We will now proceed to the consideration of some of those constitutional tendencies, which render persons liable to spitting of blood. It has been frequently remarked, that bleeding from the nose, during the periods of infancy and adolescence, is a symptom of frequent recurrence in those who are obnoxious

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\* It is not meant, that the effused blood occupies the texture of the lung, without becoming organized. This is certainly not the case; all I mean to assert is, that the portion of the lung, originally rendered solid by the clot, remains solid, in some cases, for a great length of time, constituting an insulated mass impervious to the air itself, but not a source of irritation to the surrounding parts.

to this disease, without any apparent cause, and unaccompanied by any proper fever, the attack comes on with an hæmorrhagic excitement of the circulation, sense of constriction in the chest, anxiety, dyspnœa, cough, and expectoration of blood, of an arterial colour and frothy appearance. As soon as the expectoration, which is sometimes copious, sometimes scanty, takes place, the patient gets relief. There is not much preceding or following cough. Such are the characteristics of this hæmorrhage, which does not prove the existence of tubercles, or engorgement of the system of the pulmonary artery, and has no more reference than epistaxis to disease of the lungs. I knew seven gentlemen of the same family, most of whom were in the army, and residing in different climates, who were all subject to sudden expectorations of blood, without any particular antecedent or subsequent cough, or other symptoms of chest disease. Now I need not tell you, that as long as the hæmorrhage preserves this character, and confines itself to the bronchial mucous membrane, there is very little mischief done. Persons thus affected will have repeated attacks of this kind, and though their lives are not the best, may attain a good old age. It is only when the extreme branches of the pulmonary artery take on the hæmorrhagic action that danger is to be apprehended; and so it was with one of the gentlemen just mentioned. He had, during a period of twenty years, many sudden and often violent attacks of hæmoptysis, which never lasted more than a few days, and always subsided without leaving a trace behind. So long as the hæmorrhage was bronchial, it was comparatively free from danger: at last its seat was changed; it occupied the air cells and intervesicular cellular tissue of the lungs, and he died of pulmonary apoplexy. When the latter takes place, you must be on your guard, for I have seen cases of melæna, where the customary discharge of blood from the intestines was considerable, and instances of piles, where the bleeding from the rectum was great, from being suddenly arrested, produce pulmonary apoplexy and death. In such cases, gentlemen, nature attempts to establish a vicarious discharge for that which has been suppressed. This is a frequent occurrence in females, particularly those of a robust habit, in whom the general vascular action is not diminished at the catamenial period. In consequence of the suppression of the menstrual flux, blood is discharged from various parts of the body, but particularly from those tissues which bear the closest analogy to that from which it is naturally derived. Hence we have one kind of bronchial hæmorrhage arising from suppressed menstruation, and which is not usually either preceded or followed by cough or other pulmonary symptoms. Now, this discharge in females is not dangerous; it goes away as it appeared, without any bad effects; and the same may be said of hæmorrhage from other parts resulting from the absence of the cata-

menia. Such, you will recollect, was the case of a woman in the Chronic Ward, who had regular attacks of hæmatemesis at the periods in which the menses should naturally appear. Nothing is more common than to find this vicarious gastric hæmorrhage in women, and yet, how rarely do we see it preceded or followed by organic disease, or producing the least permanent lesion or even dyspepsia. Such hæmorrhage may be generally said to be devoid of danger. As I mentioned before, the translation is commonly from the mucous membrane of the uterus to a similar surface of the nose, lungs, stomach, or bowels. It seldom or never appears in a parenchymatous tissue; and hence, in the lungs, rarely terminates in pulmonary apoplexy. There is this freedom from danger, however, only in those cases where no disease of the lungs, or tendency to pulmonary engorgement, previously existed. Thus, in the case of Eliza Hems, in whom, at the usual period of her menstrual evacuation, a vicarious epistaxis and hæmoptysis occurred; the source of hæmorrhage was not confined to the bronchial tubes, but extended to the air-cells. The blood she expectorated was, at first, of a florid arterial colour, and was copious; it afterwards became dark-coloured, and less abundant, and its source, as was evident from the stethoscopic phenomena, was derived from the ultimate ramifications of the bronchial tubes and the air-cells. *She had been subject to cough and expectoration of mucus for a year previously.*

With respect to the hæmoptysis which attends pulmonary apoplexy, I shall only remark (as its symptoms are well known), that here you have the cough, dyspnœa, and other symptoms, following the hæmoptysis, and very frequently pneumonia, and even gangrene. I have stated before, that I considered the two latter occurrences as resulting from the same cause which produced the pulmonary engorgement, and not as a consequence. I will pass over this subject at present, and proceed to give you a few general hints on the hæmoptysis which accompanies tubercular consumption. You remember I remarked that it is a disputed point whether this spitting of blood be the cause or consequence of phthisis. When we come to consider this subject dispassionately, and leave out theories, we find, that on examining phisical hæmorrhage, we invariably perceive that the discharge is bronchial, and that it presents the usual characters of arterial blood. It is because the irritation is bronchial you have so many bronchial râles in phthisis; and hence, if you find bronchitis at the top of both lungs, and none at the bottom of either, and this condition is permanent, your suspicions are naturally awakened, and you are led to the detection of tubercles. I mention this fact, because it proves that one of the permanent characteristics of phthisis is the presence of more or less bronchitis. As the bronchial hæmorrhage in phthisis is generally small, and finds a ready exit, it will not be

easy for you to confound it with pulmonary apoplexy. The bronchial engorgement which occasions this hæmorrhage often sets in at an early period of tubercular phthisis. When this happens, a copious hæmoptysis may occur, and may be the first symptom which attracts attention to the state of the lungs. Hence hæmoptysis is often erroneously considered as the cause of the consumption. I beg you to remark, that the bronchial tubes are also the principal source of the puriform expectoration which attends consumption, and that we are not to suppose that it comes exclusively from the cavities in the lung, for the quantity expectorated is by no means in proportion to the size of such cavities. Again, where the hæmoptysis happens to be copious, it is thought to arise from ulceration, or erosion of the coats of the arteries, which accompanies the tubercular destruction in the lung. An occurrence like this is, I believe, extremely rare indeed. Such an injury is too serious, and would be followed by too rapid a fatality. Nay, you will ever find, on dissection, that the bronchial tubes will be cut across by ulceration, and every other part of the tissue of the lung destroyed, while the coats of the artery remain comparatively uninjured, its cavity becomes obliterated, and you can trace it passing like a string through the abscess. Neither have I observed that the hæmoptysis which arises in phthisis is produced by ulceration on the mucous surface of the bronchial tubes, though I do not know whether this might not cause it, when the ulceration is high up near the trachea.

I shall detain you no longer on the symptoms of phthisical hæmorrhage (only remarking that it is generally in the advanced stage that it appears, frequently from induced bronchitis and hard cough, in which case it is generally scanty, or from abscess, although here, also, from the obliteration of the arteries before mentioned, it must be very slight), as the symptoms of this, and the symptoms which accompany common severe bronchitis and pneumonia, are easily recognised, and have been sufficiently described in books. You will find that Cruveilhier instances diseases of the heart as a great cause of pulmonary hæmorrhage. No doubt this is true in many cases; for if there be a serious impediment to the return of blood to the left auricle, it will induce pulmonary disease, and you can readily conceive how the valvular structure of the heart may bring on hæmorrhage from the lungs. Now, gentlemen, while on this subject, I shall make one observation. Since Corvisart wrote his great book on Diseases of the Heart, and Laennec published his admirable discoveries, it has been the custom to call all hypertrophied hearts diseased. But, let me tell you, that there are considerable enlargements of the heart in which we are not to look on the hypertrophy as a disease, but as a wise provision of nature for the prolongation of life. If a person be born with asthma, his heart will become enlarged, be-

cause, during each fit, a greater degree of stress and labour is thrown on the right ventricle, and consequently that portion of the heart becomes enlarged, and is hypertrophied in the course of time. The same takes place, to some extent, in hooping cough, in bronchitis, or emphysema, which lasts for a considerable time. If an old man has constant cough and expectation, and his lungs become emphysematous, hypertrophy takes place, and you will find his heart enlarged on examination after death. And are you to look on this as disease? Not at all; it is the means of prolonging his life. The practical bearing of the question is, that you should be very cautious in giving digitalis, and similar remedies, in such cases; for if you thereby weaken the heart's action, the obstacle to the transmission of blood remaining the same, you do your patient a great injury and contravene the wise purposes of nature\*.

I shall say nothing at present of the other diseases which produce hæmoptysis, for, when speaking at a future occasion on the subject, I shall be able to show you how it may proceed from engorgement of the liver, purpura, or scurvy; at present let us proceed to the treatment. This, of course, must vary according to the source of the disease, for when it arises from the causes last mentioned, your treatment must be very much modified. Into a description of these passive hæmorrhages I do not mean to enter, and shall only remark, that it is in such cases that opium should be given from the beginning, and in no other kind of hæmoptysis. In common cases you may, towards the termination of the disease, particularly where bleeding and other antiphlogistic means have been premised, employ this remedy with advantage. We know that there are many cases of hæmorrhage where opium, by its action on the nervous and vascular systems, proves a powerful styptic. Instances of this are seen in its power in arresting the flooding of parturition, and in another kind of hæmorrhage to which I would point your attention, I mean, that bleeding from the gums which sometimes follows the use of mercury. I remember a case of this kind, in which the bleeding from the gums was excessive, and all remedies failed in arresting it. The medical gentleman who attended it had employed every means in vain, and came to me, at twelve o'clock at night, to see if I could tell him of any thing that might be of service. I said to him, "go home, and give two grains of opium immediately, and then half a grain every hour until the bleeding stops." He seemed a little incredulous, but, however, made trial of the remedy, as I directed, and before three grains of opium had been taken, the bleeding ceased. This cursory

\* Doctor Corrigan has made some admirable observations upon the injurious effects of digitalis in cases of permanent patency of the aortic valves.

explanation will, I trust, prove useful to you in practice. In books you will find, that when you meet a case of hæmorrhage, you should give immediately acetate of lead, with opium and other styptics; but remember, that in nineteen cases out of twenty, you should not give opium with or without acetate of lead in the beginning. When venesection has been premised, and the bleeding continues, then you may give it, and give it in large doses.

The remedies which I have spoken of are fitted for cases of slight hæmorrhage, as that which occurs in phthisis; but when a person spits up a large quantity of blood from an affection of the bronchial tubes, or in consequence of pulmonary apoplexy, what will you do? Commence with bleeding your patient; and here a depressed state of the vascular system should not deter you from the instant adoption of energetic practice. The person who gets an attack of this kind is frightened at the quantity of blood; his face becomes pale, and his heart is weakened in its action, and this is a fortunate occurrence, as it tends to diminish the hæmorrhagic excitement. Now, gentlemen, as to bleeding; you will find its necessity urged in books, and I will not press it on your attention, but will say a few words about other remedies. In all cases where bleeding is required, after venesection, the next remedy in which I place the greatest confidence is ipecacuanha, and the way in which I give it is two grains every quarter of an hour, until there is some improvement, and then every half hour, or every hour, until the bleeding stops. Here I must remark to you, that it is a mistake to suppose, that it is the nauseating effects of ipecacuanha which alone produce a cessation of the bleeding; tartar emetic nauseates too, but it will not arrest the hæmorrhage. Richter, the author of the German *Elements of Surgery*, was the first who pointed out this anti-hæmorrhagic effect of ipecacuanha, and Dr. Sheridan of this city has shown, that it may be given with success in hæmatemesis, although it may affect the stomach so far as to produce vomiting; it exerts the same influence over hæmorrhage from the bowels, as I have frequently proved in this hospital: I prefer it to acetate of lead. I may be asked, do I reject the latter remedy? Certainly not; I give it, but only at the same time I give opium; that is, towards the termination of the disease. I give it too in combination with opium, and it is a curious and happy circumstance, that these two remedies act well together. Before I commence with the ipecacuanha, I generally prescribe a purgative injection and a powerful saline purge; that which I give is infusion of roses, sulphate of magnesia, and a little sulphuric acid. The purgative is intended in this case to act as a derivative from the lungs. We see every day the great sympathy which exists between the mucous membrane of the bowels and lungs, and we observe that in cases of phthisis, and the chronic cough of old men, where pur-

gatives have been administered in the latter disease, or where diarrhœa occurs in the former, that the discharge from the lungs is lessened. I had an old gentleman, some time ago, under my care for one of those chronic coughs; he got tired of me, and went to Leamington and consulted an eminent physician residing there. He was purged very actively, for a considerable time, and the expectoration and other pulmonary symptoms began to decline, and finally were entirely removed. He wrote several letters to his friends in Dublin, detailing the improvement in his disease, and abusing Dr. Graves for being unable to do any thing for him. He returned to Dublin, the shadow of his former self, but cured of his cough, and died in about a month afterwards. His case strongly evidences the remarkable influence which discharges from the stomach and bowels produce on discharges from the lungs, and gives you a reason for the powerful effects of purgative medicine in hæmoptysis. With respect to digitalis, I must confess that I never use it. I may say the same with several other remedies which have been recommended in spitting of blood. I may be right or I may be wrong; but I think it better to be handy with a few tools than to be perplexed by the apparatus of a cumbersome workshop. There is another agent which you may employ in this disease, I mean the popular remedy of giving the patient a table spoonful of common salt, and making him swallow it without water. I have seen this stop hæmorrhagic effusion; it was in the case of a friend of mine, when I was at college, who was attacked with spitting of blood late at night. At that time the good old custom of shutting the college gates at twelve o'clock prevailed (I do not know whether it is the case now); we were in great alarm, and could get neither physician nor medicine. We gave him salt, which he chewed and swallowed most manfully, and, after three or four table spoonfuls, the bleeding stopped. We may, perhaps, account for this in some way, by considering that the action of the muriate of soda on the mucous membrane of the mouth and throat is propagated to the air passages and lungs; you may, therefore, if you like, while you are tying up your patient's arm, in order to draw blood, give him a spoonful of salt, as it may produce a favourable effect.

I have done now with the subject of hæmoptysis, and on Saturday, will direct your attention to some cases of interest, particularly one of painful swelling of the extremities after fever.

## ESSAY ON YELLOW FEVER,

BY DR. GILLKREST.

REGARDING Gibraltar in particular, we may be allowed to state that a residence there within the last few years brought us into frequent contact with a gentleman who had been present during the existence of the disease in the years 1810, 13, and 14,—Mr. Amiel, many years on the medical staff of Gibraltar, and now surgeon to the 12th regiment. The evidence of this gentleman, comprising the fullest details upon every point, goes to refute the statements made regarding the importation of the disease at any of the periods in question, and is fully corroborative of the evidence upon the subject placed before the public by Sir W. Burnett and Dr. Bancroft. The only forms in which Mr. Amiel's statements have come before the public are, a short memoir printed at Gibraltar, and a paper to be found in the Edinburgh Medical and Surgical Journal for April 1831. We have been assured by him that the impression given \* by the present superintendent of quarantine in this country, as to the disease having been cut short in 1810 by his recommendation of segregating the cases, is utterly fallacious; for, as has also been specially certified to us by Dr. Bobabilla, another practitioner resident during many years in Gibraltar, the progress of the disease was stopped, *as it is always found to be*, by the setting in of a cold wind from the north. It must be obvious that placing a point like this on its true footing is of the highest importance to the public. Notwithstanding the body of evidence on record against contagion in all the Gibraltar yellow-fever epidemics up to the year 1814, and though from Bancroft's works it appears that among the medical men of that garrison the majority of opinions had been greatly against it, it was nevertheless impossible that un-

biased persons should be uninfluenced by the statements published by two officers of the quarantine department †, who, having been on the spot, had ample opportunities of arriving at the truth on such points. The circumstance here alluded to is the assertion, that, during the epidemic of 1813, at Gibraltar, the people employed in the dock-yard there, having been strictly separated from the rest of the garrison, remained free from the disease. Here, then, was evidence fully in support of the utility of quarantines, and of the propriety of separating, on future occasions, the healthy from the sick. But what was the astonishment of the profession on finding that mis-statements had here taken the place of facts, as shown by Dr. O'Halloran †, who had served in a regiment at Gibraltar for some years subsequent to the period. During a residence at Gibraltar, we had ample means, by referring to the declarations of the official authorities at the dock-yard, of confirming the assertion of Dr. O'Halloran as to several cases of the fever prevalent in 1813 having occurred there, as well as some deaths; indeed the names of twenty-three (of which seven proved fatal) could be here given, were it necessary: so that, regarding the original statements, no impressions favourable to the accuracy or candour of the quarantine officers who made them can be entertained; and in the justly severe remarks of Dr. O'Halloran on the subject, to which no reply has been made, future observers of circumstances connected with the public interest have received a salutary warning.

The terrific epidemic of 1831 at Barcelona gave a new impulse to the question of the contagion of yellow fever. The statements furnished by the medical commission sent from France ‡ to make researches into the

\* Ibid.—Fraser's (W. W.) Letter to Lord Chatham

† O'Halloran on the Yellow Fever of Spain, p. 168.

‡ Dr. Pariset, medical chief of the quarantine department, with Drs. François and Bailly.

\* See Pym on the "Bulam" Fever.

nature and origin of that disease, left a strong impression on the minds of many in the profession favourable to its possessing a communicable property; and the "*Histoire Médicale*" displays literary powers of a high order on the part of Dr. Pariset, who was at the head of the commission. The same gentleman, however, (Dr. Chervin,) who had devoted so much time and labour, as already shown, in procuring authentic information, in the West Indies and America, relative to the question of the transmissible nature of the yellow fever, followed Dr. Pariset step by step some time after, not only at Barcelona, but through all parts of Spain, where circumstances had been detailed respecting the propagation of the disease. The result has been,—not a mere series of assertions against assertions,—but a collection of documents duly authenticated, such as had never before been laid before the public on any question of this kind. As elucidating a long-pending question of high importance to society, their value may be judged of from the opinion of the Academy of Medicine, which has been already referred to. We regret that space will not permit our furnishing many valuable extracts from the works of this gentleman, published in 1827 and 1828\*. We are furnished with the statements of Dr. Pariset and

This is not an occasion to enter on the alleged political motives by which this commission might have been influenced, with a view to favouring the adoption of the famous *ordonnance sanitaire*, previous to the invasion of Spain in 1822.

\* In the "*Revue Critique*" by Dr. de Fermon of Paris, printed in 1829, a *résumé* of the occurrences here spoken of may be found.—Dr. Reider of Vienna, who has also made yellow fever the subject of particular investigation, and undertook, for the purpose, voyages at different times to the West India Islands and the American continent, states, in a memoir published at Vienna in 1828, that the disease "was never imported into Europe or anywhere else;" and that "it never originates in, or is propagated by, contagion." He deplors the manner in which governments are misled, and the best interests of humanity sacrificed, by those who endeavour to maintain the present system of quarantine.

others regarding a multiplicity of events connected with the appearance and progress of the yellow-fever epidemics of Spain; and it cannot but be admitted, we think, that Dr. Chervin has shown, in a manner the most conclusive, that many inaccuracies had crept into those statements, and that the events warranted conclusions quite opposite to those which had been come to. Dr. O'Halloran, who went to Barcelona to observe the epidemic of 1821, had, previously to Dr. Chervin's visit there, pointed out some of the most important errors of Dr. Pariset; and in his book, already referred to, some interesting statements are furnished relative to occurrences at other points.

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 REMINISCENCES

OF AN

## ARMY MEDICAL OFFICER.

 PART I. CHAPTER VII.
 

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WE now enter upon the third and closing year of our medical studies at Edinburgh. We studied afterwards elsewhere.

During the winter session of 1809-10, I began the day (as formerly observed) with Dr. Home. My health was then re-established, and I was, therefore, able to attend closely to my duty.

By this time, however, I had experienced the fate of most young men who do not acquire habits of dissipation; for I had formed sundry agreeable *liaisons*, and even a particular attachment, in the Caledonian metropolis. By birth I am an Englishman, but in no other respect than this accident\* do I claim the privilege. My parents, on both sides, were not only Scotch, but even of

\* "Sure," said the Irishman, "it's no reason I should be a horse because I was born in a stable."



Highland derivation, so that I consider myself a legitimate son

“Of the north countrie\*.”

This has nothing to do with national prejudice. Although possessing a due degree of native warmth, I have ever considered men of all creeds and nations entitled to my regard, if they, by their conduct, merited it. Abroad, therefore, I have been considered a Cosmopolite; and when ascertained to be a subject of his Britannic Majesty, I have been commonly supposed to be an Irishman; so it was in that regiment, concerning which it will be my duty to speak in due time.

Strong as was the temptation of the

“Compagnie of gentle dames,  
And damosels so fair,”

to turn me aside from the proper business of the lecture-room, I had prudence and resolution enough to compromise the matter.

In Scotland, getting married is often a matter of inconsiderate amusement, and English parents have been inclined to hesitate ere trusting their sons to Scottish tuition, lest some unprincipled and designing female should inveigle them into a serious engagement of this nature. I recollect several instances of Edinburgh students being thus caught; and I was once myself (at an evening party) married *fa fue!* It so happened, however, that the bride and bridegroom had too much regard, the one for the other, to make any subsequent claim for conjugal rights; the matter, therefore, ended where it began.

My plan of compromising this double claim was the following:—I never visited, even the most attractive fire-side to which I was admissible, until the Saturday evening. In the course of the current week it frequently happened that an extemporaneous effusion of the *Muses* (for even then I paid my respects to more than one) found its way to quarters of whose approbation the author was,

at least, *sufficiently* vain; but it was always accompanied with the motto—

“Sine me, Liber! ibis.”

Waiting for the desired meed until the lawful day for relaxation (Saturday) came round—that day, until towards the close of the Session, being a blank at the University. Even at this dawn (as I may, perhaps, express myself) of professional life, I devoted the early part of Saturday to attendance upon the supreme courts of judicature at the Parliament House. I remember the Old Court of Session, with its fifteen judges, some of whom were apt to forget their pocket-handkerchiefs, when they went forth to take their places on the Bench, and cut a queer figure accordingly. A whig administration, however, (in the course of my attendance,) obtained the ascendancy, and split the “auld fifeteen” into two chambers, the one consisting of eight, and the other of seven, and so they remain (as scripture saith) until this day.

During the session in question I had an opportunity of correcting my M.S. of the lectures on midwifery\*, (delivered two years previously, by Dr. James Hamilton,) in consequence of my attending him a second time. He was (or I ought, rather, to say is) a little lively man, with a torrent of conversation, and all but identical with the sex to which he confined his professional attention. I gave him infinite credit for his *veritable esprit du corps*; but he made more amusement among us than instruction—in the following way:—

All the world knows the author of the celebrated work on “*Purgative Medicines*”; and no man, be he medical or profane, who ever visited Edinburgh, has not seen him.

Pardon an anecdote, for it relates to medicine. I was passing, one day, along the most frequented street of Modern Athens, in company with the late Dr. R——, of N——, when we were absolutely *shouldered* by a stout

\* “The Minstrel,” stanza 2.

\* And still most religiously preserved.

burly and portly elderly gentleman, distinguished by a cocked hat, black court dress, buckles, and ruffles, quite in the style of a *Cheyne*, a *Pitcairn*, a *Garth*, or a \* \* \*. "Who is that?" said my companion. I answered, in a dry and deliberate manner, "It is Dr. H——, *à posteriori*\*." The same gentleman was passing over the North Bridge with me one day, when a little, smart, sharp-visaged figure brushed past us, as if in haste. Dr. R— inquired, "Do you know who that is? I meet him every day, but have never been able to make him out." "Know!" said I, "who does not know the editor of the Edinburgh Review?" "What! good gracious!—good bye!" and back he turned, running as fast as possible, in order to get a front view of one whom he appropriately styled "a giant in literature."

While telling these stories, I may as well bring in one more. A very old and intimate friend of my own (now a squire of "high degree," but, at the time, a student of law in Edinburgh), was walking with me on or about the spot mentioned in the foregoing story, when we met a gentleman, to whom I gave way, with a deportment somewhat reverential. "Who," said the embryo lawyer, "is that slouching, awkward-looking man?—I pass him here-about almost every day." "Do you not know?" "I don't." "Then prepare to be surprised at, and ashamed of, your ignorance. *There goes Dr. Gregory!*" I shall have done with this, by adding that, though I spent three years in Edinburgh, without intermission, I never, to my knowledge, saw the celebrated and remarkable JOHN BELL.

But, to return to the clan Hamilton. Dr. H., *à posteriori*, removed from the Old Town to the New, and took up his abode in St. Andrew's-square, next to his namesake, *à priori*. The confusion to which this gave rise was indescribable. Colman's poem

about the Maiden Aunt being with child, and wanting an accoucheur in the middle of the night;—nay, M. Tonson's own self, with all his adventures, could hardly parallel the mistakes. I shall not undertake any account of them. It is enough to say, that H. *à post.*, and H. *à pri.*, were very different persons, and (as the story went) not even upon speaking terms. If a lady was taken in labour in the night, Dr. H. *à post.* was sure to be called; and if an unlucky schoolboy had the gripes, it was Dr. H. *à pri.* who was summoned, merely to administer a purgative. It finally became a nuisance to the neighbours.

St. Andrew's-square, in Edinburgh, was *doctor's ground*, like Saville-row, or New Broad-street, in London. There were Gregory, the Monros, the Bell, and many others, within less than pistol-shot of one another. In this square the two Doctors Hamilton had their residence; and in which, for any thing I have heard to the contrary, they live to this hour; and long may they enjoy the view of Lord Melville, who, in dumb show, acts St. Simeon Stylites, to the great edification of the Presbytery\*.

I must here snap the thread of my discourse, reserving portraits of the Botanical and other Professors for a subsequent chapter.

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#### DR. RYAN'S DAMAGES.

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IN a former communication, I took the liberty of suggesting a hint concerning an *auxiliary* method of aiding this laudable subscription, which, though not entitled to any higher designation, I had an idea might prove

\* Upon a stone column, sixty feet in height, stands a colossal statue of the late Henry Dundas, Viscount Melville, First Lord of the Admiralty, King of Edinburgh, and Viceroy of Scotland. Mad Simeon stood at an equal height, for a much longer period than that during which his Lordship has been elevated; but he beat him hollow, for he was alive all the time, and stood *upon one leg*.—See *Church History*, &c.

\* By way of distinction, the other learned personage was cognomened *Hamilton, à priori*.

to be a somewhat important one. I have not, however, seen it acted upon; and, *foi d'honneur*, I am disagreeably surprised. My wonder does not flow from the proposition having been neglected out of disrespect to the proposer, for he wears an *incog.* in the matter. Even were it otherwise, and my name, street, and number, had been appended to the proposal, it ought to have been adopted or rejected upon its *own merits*, and not from feelings entertained towards its *author*. However, let this pass. I am sorry, on my own part, for the failure, because those whom I wished to serve, and who have a just and equitable claim upon professional support, are likely to experience disappointment. All the respectability of the profession will lend the victim the benefit of their *countenance*; but those who will help to defeat the enemy at the small pecuniary expense of a *penny*, are but a drop in the capacious bucket. "He that is not for us is against us."

What can the reason be that our brethren, even after this facility was afforded them, have hung thus *shamefully* back, and left a leader to perish (for aught they know, or seem to care) in a glorious contest? I shall assign a few hypothetical ones, hoping that each of them may prove to be founded in mistake.

First, then, comes the *infra dig.* consideration. "What! degrade the profession by subscribing a shilling, as one might at a church-door on the occasion of a bishop preaching a sermon!! Monstrum, horrendum, et incredibile." I tell thee, O man of mock dignity, that *this* cannot be thy real reason. Thou art covetous and greedy, and wantest a pretext for exemption.

Secondly.—"What good would a shilling do in making up hundreds of pounds?" Art thou so short-sighted, such a wretched arithmetician, such a hobble-de-hoy of a financier, as not to know that twenty shillings make one pound, that five-score pounds amount to one hundred, and that hundreds enough put together make

four, five, six, or seven hundred, as the case may be! To such a grumbler I would say, "Give your shilling by all means; but see that you put a private mark upon it, in order that it may be identified, in case of your applying to have it returned."

Thirdly.—A liberal man, superior to the inveterate prejudices of the present day, may be supposed to express himself in this manner. "I am struggling hard to obtain an honest livelihood for a numerous family. A shilling, however, even to me, is not a matter of consideration, where a guinea would be a serious one. But how am I to forward it? Going by itself it would not pay its expense of carriage and delivery; besides which, even by transmitting it free, through some particular channel, I should only expose my poverty in quarters where I am most anxious to conceal it. I am perplexed. I like the proposal, but I cannot, in an individual capacity, act upon it." Let me attempt, my friend, to relieve you from this imaginary embarrassment.

When you leave home in the morning, ask your good lady to give you 1s. towards the support of Dr. R., and your grown-up children, or other discreet members of your family,—your breakfast party, for instance,—to do the same. This cannot be deemed *levying a tax*, it can amount to no more than *gathering a voluntary contribution*. When you meet a brother practitioner, either in the street or elsewhere, accost him thus: "Ah, Doctor (or Mr.), how do you do? Have you subscribed for R.? if you have not, give me your shilling, as I am making up a sum among my friends, and am anxious to send it off, as soon as it comes to a pound or two." "My dear sir, I have not a shilling about me." "No!" "No." "Have you no money at all?" "Nothing less than half-a-crown." "Well, let me have that, because time presses, and the committee will owe you 1s. 6d.; or, if you choose, I will give you change upon the spot."

In a thousand pleasant ways this

object might unquestionably be accomplished; but "who will bell the cat?" I would, if I were not confined to a sick bed, and no medical, and, indeed, no accomplished man of my acquaintance should escape my importunities, were I able to go about.

In testimony of my sincerity, I herewith enclose 1*s.* as the father of the proposal, though I stand in need of it to purchase that alleviator of pain, denominated *opium*.

## ORIGINALS.

[We insert the above as the effusion of a gentleman, who has laboured as zealously and as indefatigably as any member of the profession. Dr. Ryan feels much obliged for the expression of the sincere sympathy displayed in this communication, and prefers it to the cold and apathetic feeling of those whom good luck, and not talent, has placed in situations to which they have no other pretension than private interest and gross humbug.]

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TRIUMPH OF JUSTICE OVER MONOPOLY.—IMPARTIAL DISTRIBUTION OF SUBJECTS.

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To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

IN accordance with the promise, which the Right Honourable Lord Melbourne made to me, as stated in your Journal of the 22d ultimo, I have the pleasure to inform you, that, by his Lordship's interposition, the monopoly in the distribution of subjects is counteracted, that I am now supplied, and am to be henceforth, from the same source, and in the same degree as other anatomical lecturers.

I am, Gentleman,  
Your very obedient servant,  
G. D. DERMOTT.

30, Francis-street, Bedford-square,  
December 31st, 1832.

MEDICAL AND SURGICAL NEWS  
FROM ANTWERP.

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By the documents received in Paris, up to the 25th ultimo the French army, in the neighbourhood of Antwerp, has suffered much less from disease than had been anticipated. A few cases only of dysentery, bronchitis, and intermittent fever have appeared. The majority of cases on the list have been continued fevers, complicated with local affections.

A letter from M. Larrey, junior, one of the surgeons attached to the expedition, dated Bergem, 19th Dec., states, "Up to this period, the wounded of our army have not exceeded 500."

It appears, that M. Setrim, chief of the medical staff, extirpated the upper third of the os femoris, in the hope of its proving more successful than the operation usually is, where the whole limb is taken away, in cases where the fracture extends to the head and neck of the bone. The man lost very little blood during the operation, and it is stated, that not a single artery was taken up. His state, during the first two or three days, gave hopes of a favourable result, but he has died since.

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EXAGGERATED ACCOUNTS OF THE  
RE-APPEARANCE OF CHOLERA IN  
PARIS.

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WE are perfectly aware that, at one or two points in Paris, some cases of cholera have appeared (for the most part among the military) within the last month. But we are also most fully aware, that the exaggerated accounts which have lately appeared on this subject in London, have been put forth by the interested clique, as a point likely to favour their holding office a little longer.

THE

London Medical &amp; Surgical Journal.

Saturday, January 5, 1833.

## MEDICAL REFORM.

WE are convinced that the next Parliament will include, among the various abuses which it is pledged to reform, those of the medical profession. There is not a civilized country in the world in which there are so many abuses in the practice of medicine, or, in other words, among those who undertake the preservation of the public health. Were a census taken of the profession at this moment, more than one half who style themselves doctors, surgeons, apothecaries, accoucheurs, and midwives, would be found mere pretenders to the healing art.

The chemists and druggists must not be forgotten, as they act not only as apothecaries, but as perfumers, nostrum-mongers, physicians, surgeons, and accoucheurs. They prepare physicians' prescriptions, of which they are utterly ignorant; they prescribe for and visit the sick, without any medical education; (they return home to sell scented soap, brick-bats, pepper, mustard, tea, sugar, snuff, and cigars;) and thus ruin the educated apothecary, who has spent the best part of his life and his property in obtaining a knowledge of his profession.

Next in order stand the hordes of advertising quacks, who infest almost every street in the metropolis, and who, by their alluring advertisements in the newspapers, profess to cure all

diseases. They are indirectly supported in their imposition and knavery by the best possible public instructors, whose palm itches for the sordid lucre derivable from the destruction of the health and lives of the unsuspecting and largest portion of the community, who look upon the said instructors as oracles.

In saying this, we do not intend to depreciate the value of the press, but we show that its owners lend their power in support of the basest purposes, and for filthy gain. Is there an influential paper in town whose pages do not contain advertisements of quacks and patent medicines? And is there a single paper, as yet, that has aided us in our honest endeavours to expose empiricism? Nevertheless, we find exposures of filthy markets, filthy streets, bad provisions, &c., but not a syllable about adulterated medicines, or about unprincipled persons, male and female, who have the temerity to undertake the treatment of diseases.

Another abuse in the profession is, the toleration of ignorant women acting as midwives. So great was this evil considered nearly a century ago in France, that the Home Minister of the time ordered the faculty to prepare a code of plain instructions for midwives, and that this should be circulated throughout the provinces by the clergy and magistrates. In this country, our midwives in general are illiterate individuals, and are the cause of one-half of the mortality among the poor. Our press and legislature are silent on these subjects,

but loud in their condemnation of the barbarity practised in manufactories ; while the human female, and her offspring, when placed in the most dangerous of all situations, may be for ever injured, or indeed destroyed, with impunity, and without any notice from the powers just mentioned. Were we to insert the black catalogue of deaths caused by quacks and midwives, we should rouse the indignation of every right-minded individual in the kingdom. But we have said enough to show our non-professional contemporaries, that the abuses in the practice of medicine amongst us deserve their reprobation, and call loudly for removal.

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#### SUCCESSFUL WORKING OF THE ANATOMICAL BILL.

OUR readers will recollect, that, a fortnight ago, when some of the private medical schools, and even that of the London Hospital, had not a supply of subjects, one of our contemporaries advised the injured to observe silence, for any one who remonstrated was an enemy to the whole profession. The folly of this sage counsel was apparent to every one ; but its promulgator, to show his superiority and his importance, deemed it politic to abuse the students who met at the Albion Tavern, for the purpose of memorializing the Secretary of State to afford them redress. We applauded their spirit, and advocated their undoubted right to adopt such a course ; while another contemporary strenuously denied that the Secretary had power to interfere, and that the iniquitous bill, as he designated it, to which we have already alluded, should be repealed. We, on the contrary, maintained the affirmative, and contended that the Secretary of State had ample power, would exert it, and

cause the law to be enforced impartially. It now appears, that our opinion was correct, for Lord Melbourne has written to the parish authorities, and placed the distribution of unclaimed dead bodies under the control of the inspector of anatomy. We, therefore, enjoy another victory over our valued contemporaries. We anticipated this, because our arguments were based on reason, justice, law, and common sense. We are also proud, that the monopolists of the large schools, and their boisterous pupils, against whose petty opposition we remonstrated, have been taught that their puny efforts cannot annul a public act of parliament. Experience has now shown them the consummate folly, on their parts, of attempting to impede the operation of the law of the land.

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#### OBSERVATIONS ON THE POWER AND EFFECTS OF COLD, AS A CAUSE OF DISEASE, &c.

BY JOHN CLENDINNING, M.D.

THERE is no one of the causes of disease which, in popular estimation, is so extensively mischievous as cold. Febrile, inflammatory, almost universally, and in numberless instances nervous, cachectic, and other forms of disease, are laid to the charge of that agent. And the popular opinion has unquestionably a foundation in truth, and is to a great extent confirmed by daily professional experience. A very large portion of the mortality of all climates is attributable to changes of atmospherical heat and humidity, and this in a double sense ; much disease is occasioned by hourly and daily fluctuations of the thermometer and hygrometer at all seasons ; while a still greater destruction of human life is found to depend on the change from the soft airs of summer to the chilling blasts of winter and spring. "Half of mankind," says Ritter, "perish before the close of the third year."—"If, on the one hand," says the same writer, in the article

*Ausdünstung* of Ersch and Gruber's *Encyclopædia*, "we recollect the susceptibility of the teguments, and the frailty of the incompletely formed organs; and, on the other hand, the numberless occasions of taking cold, from baptism forward to the time when the child can wallow in the puddle, and sit down to cool itself in the blast, we shall soon cease to wonder at the amount of infant mortality from cold."—"The contagious class excepted," he says in another place, "there is no disease, not even of the nails, hair, or bones, that cold may not occasion."—"With the exception of a small number of diseases occasioned by unwholesome occupations, and by the contagions, the great mass of human malady in this metropolis," says the observant Bateman, "is referable to the climate or state of the seasons, and to intemperance; but of these two causes, the vicissitudes of the weather, especially its cold, are by far the most prolific sources of mischief."—(*Diseases of London.*)

But it is the change from the mild to the severe season that, in modern times, proves the most deleterious to life and health. We have learnt how to check the production and limit the range of those destructive emanations, animal and terrestrial, that caused such devastation amongst our predecessors of ruder ages; but climate, and the causes of atmospherical changes, continue beyond our control. Winter is the great enemy of the very young and the very old. "The increased mortality occasioned by severe winters has generally fallen heaviest," says Bateman, "on the aged and young children, whose vital powers are possessed of less energy than during the intermediate periods of life." Nor are the healthy without their share of danger and suffering. "Those who erroneously think the cold of winter bracing and wholesome (and the error is unfortunately very general), forget what the weak and infirm, the aged and invalid, suffer under such circumstances, and do not reflect," says Bate-

man, "on the multiplying brood of pulmonary, rheumatic, dysenteric, and other inflammatory disorders, with consumption at their head, from which even the most robust are not exempt." "During the winter of 1814," he says again, "in which the frost continued three months, the number of patients at the public dispensary exceeded by seven hundred the ordinary average, in other years, for the same period, not much exceeding five hundred. The bills of mortality exhibit a corresponding increase at that time; and an attentive observer could not fail to remark, during the whole spring of that year, how much the gaiety of that season was chequered by the numerous funerals which daily passed along the streets." The January of 1795 was, it is well known, the coldest, while that of the following year (*viz.* 1796) was the warmest January of which any regular account has been kept in this country. From the bills of mortality of those years, Dr. Heberden ascertained that the whole mortality of January 1795 was double that of the January following; and that the mortality amongst the aged in particular was five times larger in the former month than in the latter. Dr. Heberden discovered likewise a great relative increase of mortality amongst infants and young children. Like results have been lately obtained by Dr. Milne Edwards, in Paris, in researches, of which I have not at hand the particulars. And these facts and opinions entirely coincide with what I have myself adopted from observation, on a considerable scale, amongst the poor of Westminster.

Winter and spring invariably make great additions to the sufferings of invalids, particularly in pectoral complaints, as well as great inroads on the general previously healthy community. I have had frequent opportunity of observing an increase and aggravation of rheumatic and pulmonic diseases in particular, in consequence of a change of wind from the south and south-west towards the northern and north-eastern quarters.

A PHYSIOLOGICAL INQUIRY INTO THE  
USES OF THE THYMUS GLAND,

BY JOHN TUSON, ESQ.

*Presented to the Royal Society by Joseph  
Constantia Carpus, Esq., and read on the  
15th ult.*

THE subject I have now the honour of addressing you on has, up to the present moment, been considered inexplicable, and involved in inscrutable mystery. In order to give as perspicuous a view of this intricate investigation as possible, I must beg you to be particularly attentive to its anatomical structure, and accurately to consider the situation in which it is placed. It is to be observed, that it occupies considerable room in the cavity of the chest, and that it contains a great quantity of blood, that it diminishes rapidly after the birth of the child, and that it subsequently disappears. This gland, it will be perceived, lies involved in the cellular membrane of the mediastinum, and is situated anteriorly, stretching upwards into the neck, between the trachea and carotid arteries, and lies principally in the pericardium. If it be perforated, or blown into, it will be found to be of a cellular texture, and no excretory duct is discoverable; it will likewise be found, that the cells are secretory cavities, and that there is a reservoir in the centre of the gland, that it is scarcely perceptible in the early part of the foetal state, but that it gradually increases to the seventh month, and, in the eighth and ninth, it assumes considerable size, most particularly so in the ninth month. This gland produces a considerable quantity of cream-like fluid; after birth, its secretory cavities are diminished, and, according to the experiments of Sir Astley Cooper, this secretion contains fibrine, albumen, mucus, and muco-extractive matter, muriate and phosphate of potash, and phosphate of soda. The brief description I have given here is sufficient for my present purpose. You will find a beautiful

and accurate delineation of this gland, just published, by that scientific and highly talented surgeon, Sir Astley Cooper. Now, as no probable conjecture has hitherto been offered of its uses, let us, from the above description, see whether we cannot come to some satisfactory determination on this subject.

By this anatomical description, it is found to be extremely vascular, and that the reservoir, in its centre, contains a considerable quantity of cream-like fluid, which, by its chemical analysis, is well adapted for the purposes of ossification. The deductions to be drawn from these circumstances cannot but induce me to conclude, that it is intended for two purposes, the one for a receptacle of blood, the other for a receptacle for osseous matter. By marking the accordance and dependence of things, it strikes me we may be enabled to draw some useful conclusions respecting it. In order, therefore, to elucidate this subject, let us consider the contents of the sternum in the foetal state; here you will find this gland fills up an essential part of the cavity of the thorax; the lungs lie in a condensed and contracted state, yet in order and readiness for action the first moment the occasion requires its service, being composed of innumerable air-vessels, where there is no air, and elaborately constructed for its alternate admission and expansion. Contemplate next the changes that take place, the maternal life ceasing, and the infantile life beginning; here you will see nature, that does nothing in vain, or without necessity, how admirably she adopts the means for these essential purposes, and such we shall ever find to be the case wherever we can trace her steps, or follow them even by conjecture. At the commencement of the infantile life, inspiration then first takes place; the lungs, hitherto in a condensed and contracted state, must now be expanded, not only from the air inhaled, but from the circulation of the blood, which, at this period, is conveyed to them by the



pulmonary arteries. You cannot but observe, therefore, that it is necessary there should be a sufficient supply of blood to enable the lungs to assume the important functions they are destined to perform in the animal economy, and to prevent the vacuum that must otherwise unavoidably occur from so great a quantity of blood being suddenly withdrawn from the general circulation. It is absurd to suppose that nature should have neglected taking certain precautions for these important purposes. The beauty of the structure, situation, and excellent arrangements of the thymus gland now become apparent. Now, let me draw your attention to the means by which these important ends are effected, so as to leave no shadow of doubt as to this being one of its uses. This gland is placed, as you have already been informed, in the mediastinum, filling, in the fœtal state, nearly the whole cavity of the thorax; as soon as inspiration takes place, the lungs become fully expanded; it necessarily follows, from its situation and position, that pressure must, in every direction, be made on this gland. The blood, therefore, that previously flowed through it with facility, must be materially impeded in its progress, and assume a different channel; the blood, therefore, previously flowing through it is now appropriated for the purpose in supplying the chasm in the circulation, which the sudden and great supply to the lungs had necessarily occasioned. Observing all this, is it possible to suspend our lessons to the belief, that one of its natural uses is as a receptacle for the blood, which must be in readiness for the exigencies of the system as soon as its circulation through the lungs, in the infantile state, commences? In corroboration of this opinion, I must call to your attention the enormous size of the liver during the fœtal state, evidently proving they are both designed for the same important purposes; the pressure of the diaphragm acts upon the increased size of the liver in a similar way as

the pressure of the expanded lungs does upon the thymus gland, both, therefore, appropriating their blood for the purposes above stated. The harmony thus displayed, admirably shows how nature has contrived to pass from one mode of existence to the other, without any disturbance or injury to the delicate organization of the infant.

The one purpose being now, I trust, satisfactorily explained, it still remains for me to elucidate the other, that it is a receptacle for osseous matter, which appears to be the quality of the fluid secreted. That it should thus be prepared and deposited beforehand, when it is not to be used for some time subsequently, may be justly termed an instance of prospective contrivance. To illustrate this, there can be no surer proof that there was this design in its formation, than the analogy between the teeth of an infant and the osseous matter secreted in the cavity of the thymus gland. In the former of these cases, the teeth lie buried in the gums till necessity and nature call them into action; the instance now before us is as strictly analogous as possible. The object of nature in thus burying the teeth in the gums is, lest they should, which would manifestly be the case, prove rather in the infant's way than otherwise, and also injurious to the mother, while the infant was nourished by the breast alone. Nor, in a less degree, would the mother be subject to inconvenience and additional pain at parturition, had the osseous matter been circulating in the system, and the bones of the head acquired that solidity which, at a future period of life, would be essential. Thus we see Creative Wisdom, in this instance as in many others, looked beyond the first year of the infant's life, and made preparation for an organization which, though not immediately necessary, would, in the course of nature, be speedily required. The solution of subjects such as this, involved in intricacies and surrounded by obscurity, is no easy matter, and to im-

part the same to others, so as to remove the mysterious veil, still more difficult. I have, however, endeavoured thus to elucidate it; whether I have succeeded or not will be fairly appreciated. Here, as in many other investigations we cannot go step by step into matter of fact, our reasoning in this case must be founded on the researches into the recesses of nature; of course it becomes a task of difficulty to clearly and scientifically develop, and I am perfectly well aware in how disadvantageous a light so abstruse a subject must appear; at all events, it has afforded me much pleasure in contemplating the structure and functions of the animal economy, which the more we examine into, the more the poverty of contrivance of the most ingenious of human inventions is manifest, and we have more and more reason to admire the beauty of the structure, and the excellence of the workmanship, which every where presents itself, forcibly impressing on our minds the infinite and unfathomable wisdom of Omniscience.

J. TUSON.

Russell-place, Fitzroy-square,  
Dec. 26, 1832.

### Reviews.

*The Elements of Anatomy.* By JONES QUAIN, M.B., Professor of Anatomy and Physiology in the University of London. Second Edition. 8vo. pp. 812. London, 1832. John Taylor.

*Lectures on Anatomy, interspersed with Practical Remarks.* By B. B. COOPER, F.R.S., Surgeon to Guy's Hospital, Lecturer on Anatomy, &c. &c. Vol 2. Large 8vo. pp. 883. Four Plates. London, 1832. Longman and Co.

DURING the last few years vast improvements have been made in our elementary works on anatomy, by the introduction of foreign discoveries, and especially by the systems of

Bichat, Boyer, Cloquet, Meckel, Beclard and others. Professor Quain was one of the first who combined the foreign and national systems of anatomy in 1828; but this had been done in Dublin so far back as 1818. Dr. Knox of Edinburgh published his translation of Cloquet's Anatomy about the same time, and the *Dublin Dissector* appeared almost simultaneously. Both these works are confined to descriptive, while those under notice comprise general, or structural, anatomy; but Mr. Cooper's includes physiology, pathology, and surgery, thus differing from all its predecessors. We think this plan of teaching superior to every other, because it is more instructive and interesting to the student. It teaches the structure, functions, and diseases of every organ, and includes the treatment, so far as surgery is concerned; it shows the student the inestimable value of anatomy, as the foundation of medicine and surgery; it impresses his mind with the conviction, that a knowledge of the structure of the body, in a normal state, is indispensably necessary to the medical practitioner, before he can understand its abnormal conditions or deviations from health. Mr. Cooper has executed his work in the ablest manner; his descriptions are minute and accurate; his physiology, pathology, and surgery, are agreeable to the latest opinions on these subjects. We are satisfied that this work will be popular among students and practitioners.

This volume completes one of the most valuable elementary works on descriptive, general, and pathological anatomy, physiology, and surgery, that have appeared in this country. It proves the author to be deeply versed in scientific lore, and to possess extensive practical experience as an anatomist and a surgeon.

Professor Quain's work embraces general and descriptive anatomy; it touches slightly on surgical operations; it is most unquestionably the best guide to the student in the dissecting-room. It first treats of gene-

ral, or structural, anatomy, which has been, and is still, too much neglected in this country. Our students were taught the appearance and situation of organs, but they never heard a word on the ultimate structure or tissue, of which these were composed. The author has, therefore, introduced a great improvement, which we hope to see generally adopted. He has extracted from the best works on anatomy, and embodied every fact of value. His work is, in our opinion, superior to every other manual of anatomy. It possesses much information, that is omitted by Cloquet and the authors of the smaller works; it should have contained plates, and then it would be unequalled. The works of Paxton and Tuson are admirable in this respect, and hence so popular among students. It appears, from the preceding remarks, that the works of Quain and Cooper are materially different, and that each has peculiar merits.

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*A Dissertation on the Effects of Malaria, and other malign atmospheric influences, in the production of Febrile Diseases, with referencē to the Functions of the Ganglionic Nerves, in the phenomena of those Disorders; the whole being intended to illustrate their treatment on Physiological Principles.* By ANDREW BLAKE, M.D., M.R.C.S., Physician to the Lunatic Asylum, near Nottingham; late of his Majesty's 7th Regiment of Dragoon Guards, &c.

(From the *London Medical and Physical Journal*.)

WE regret much that we are unable, at present, to place the author's views before our readers, but several voluminous works claim a precedence. Had we not derived great pleasure from the perusal of this dissertation, we should not give it even this short notice. The name of the physician, who was one of the first to give a correct account of the disorder called delirium tremens, by which hundreds

of lives have been saved, is a sufficient motive to induce us to afford him an honourable niche in our Journal. In this work, as in his numerous essays on various medical topics, he evinces the most correct knowledge of the principles and practice of the healing art. He clearly demonstrates, that the first effect of malaria is on the brain and ganglionic, or, in the language of foreign schools, on the cerebro-spinal system. He adduces a great many unanswerable arguments in support of this opinion.

It is a pleasure to us to observe a gentleman, who has been thirty years in the army, who has visited every clime, still a votary to science. He can proudly say,

Quæ regio in terris nostri non plena laboris,  
and he has profited by his experience.

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#### CONNEXION BETWEEN VEGETABLE AND ANIMAL LIFE.

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THE following curious and instructive observations were made by Professor Burnett, in one of his lectures on botany, lately delivered at King's College. Every man, engaged in the study of natural or medical science, will peruse the subjoined extract with interest.

“The class, denominated the Flags or Algæ, includes in its several orders, sections, types, and genera, some of the most curious living structures which as yet are known: protophytes just emerging from lifelessness to life, and beings which are almost animals, but still linger on the confines of the vegetable world.

“Many of these microscopic creatures are so simple in their nature, that their very simplicity renders them a doubt. Here, indeed, is the problem of which mention has been already made; for so similar are many of the lower tribes of algæ and of fungi, that it is not only sometimes indeterminate to which of these two great classes certain individuals should be referred, but whether, in truth,

they are plants at all ; for, strange as the statement does appear, many of them may only be parts of other organic beings, and to more there has been attributed an animal existence.

“ Upon this point, however, modern research has thrown very considerable and very important light ; and several of those ambiguous things called infusorial animalculæ, and named and arranged as such in their systems by zoologists, and to which, by some, an equivocal or fortuitous generation had been most gratuitously attributed, it is more than probable are not of an animal, but of a vegetable nature : and, besides this, very many of the moving corpuscles, which have often been mistaken for monads, and which hence were once most unphilosophically supposed to have sprung into existence without parental aid, are proved to be merely portions of dissolved or dissolving organic matter, loosened in its structure, and put into motion by physical powers, which had previously escaped detection by the observant eye of man. I allude, of course, to the curious phenomena described by Porrett, under the name of *Electro-filtration*, and which Dutrochet has termed *Endosmose* and *Exosmose*, i. e. a *flux inwards* and a *flux outwards*, from the circumstance of two currents of different strengths being noticed to pass through organic membranes, when the fluids on either sides are of different densities, or in different electrical states ; and which will either fill or empty a fixed saccule, or put a moveable one in motion. This phenomenon was first observed by Dutrochet to take place in the cellulose of a small conferva, or moss-like production, which he detached from a fish's tail. Each portion of this moss consisted of a filament and saccule, from which globules were expelled, and into and out of which the currents of fluids passed. He procured other similar globules by putting pieces of flesh into the water, so that their formation was not connected with the living state of the fish. He saw these globules spread throughout

the fluid, agitate themselves in divers directions for an instant, and then precipitate themselves to the bottom of the vessel.

“ But methinks I see some ultra-utilitarian smiling at the thought of a grave philosopher being thus engaged for hours, in watching the motions of a corpuscule, so minute as to be scarcely visible to the naked eye, and methinks I hear him ask ‘ cui bono ? ’ a question that any child may ask, but one that the wisest philosophers must often find it difficult to answer ; although they may be far from admitting the pertinency of the question. When such queries are proposed, as they often are, I love to meet them with Franklin's counter question, ‘ What's the use of a baby ? ’ for no one will venture to inquire, what is the use of a man ?

“ The experiments which have led to this digression as yet are in their infancy ; but, even imperfect and crude as they confessedly at present are, they have already thrown much light on some very obscure parts of animal and vegetable physiology, and they promise to afford much more : they certainly disclose one of the most curious physical forces which have been discovered in modern times, and the just value of which we have not at present the means of estimating.

“ The same observations apply, and perhaps with still more truth, to that most curious discovery lately made by the celebrated Mr. Robert Brown, who has shown, by an unexceptionable series of experiments, that locomotion, even when apparently independent of external forces, may and does exist among particles that are absolutely lifeless ; nay, which have never been alive : so that, should not this phenomenon admit some more probable solution, it would seem that the long-established definition, which declares matter to be inert, may perhaps require a serious modification.

“ This apparently independent motion of the molecules of matter may appear to some to be a close approximation to the vital motions of plants,

or the spontaneous movements of animals ; and, indeed, the idea would seem more plausible than the belief of some German philosophers, that crystallization is an effect of vitality. The facts are simply these: that grains of pollen, particles of dead plants, some of which have been in herbaria for upwards of a century, nay, even fragments of pounded glass and stone, when diffused through water, and viewed with a good microscope, are seen to be in a constant state of motion ; and this independent of any evaporation of, or currents in, the fluid. Furthermore, that they still maintain their restless activity when hermetically sealed between two plates of glass, so as to exclude, as far as possible, all external agitation ; and are found, even under such circumstances, to continue their motions unremittingly during an indefinite period ; nay, even after the lapse of months, (I believe we may now say years,) to be as full of motion as when first observed.

“ This discovery, as just now hinted, has been thought by some to militate against the ancient dogma, which enunciates the inertia of matter. It would ill become me to advance any speculations other than as mere hypotheses, and this the more especially as the discoverer himself, with that modesty which always attends true genius, does not even venture an explanation : I, therefore, scarcely dare to suggest that it would be desirable to ascertain whether these movements may not be indicators of external motions, so slight as to be imperceptible to other means, rather than as inherent in the particles themselves. Just as many atmospheric changes are notorious with the water, that are utterly inappreciable with the mercurial barometer ; and as the expansions of bodies by heat, and the vibrations of sound, are measurable by some instruments, which are imperceptible by others, so it would be desirable to ascertain whether the motions of these molecules do or do not depend upon vibrations, otherwise imperceptible,

communicated by distant moving bodies on the surface of the earth, to the supports on which they stand ; or whether it is possible, as the movements seem very constant and similar, that they can evidence the motion of the earth itself, and thus affords the means of constructing a delicate *kinometer*.”

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#### ON ACUTE INFLAMMATION OF THE BRAIN.

BY PHILIP CRAMPTON, M.D., F.R.S.

(From the *Dublin Journal of Med. Science*.)

ACUTE inflammation of the brain, as an idiopathic disease, rarely falls under the observation of the hospital surgeon, while there are very few disorders with which he is more familiar than inflammation of the brain, as a consequence of external injury. In this last case, however, the symptoms which denote cerebral inflammation are obscured, or it may be altogether effaced, by certain other concomitant affections of the brain, necessarily attendant on the violence to which the organ has been subjected. The injury (for example) which was sufficient to excite inflammation of the membranes, would, in a great majority of instances, be also sufficient to cause more or less *concussion* of the brain, a *compression* of its substance, whether by extravasated blood or depressed bone, so that the proper signs of inflammation might be scarcely, if at all, distinguishable ; and, on the other hand, the symptoms which arise during the more advanced periods of cerebral inflammation, are often identical with those which are considered as almost peculiar to compression and concussion. Thus it often happens that the insensibility, or coma, which immediately succeeds to a severe shock to the brain, merges into the coma, which is the result of extensive inflammation, with or without effusion, and death takes place without one intervening moment of sensibility, or one sign which can enable us to determine whether the insensibility was to be attributed to the concussion, the

compression, or the inflammation of the brain\*.

To the systematic pathologist, who would arrange the phenomena of disease as he would arrange objects of natural history, giving to each its name and place in the system according to its external sign, this must be rather a discouraging view of the subject; nor can it be agreeable to the diligent student, who is deeply imbued with the refinements of the French school of pathology, to find that he must unlearn at the bedside so much of what he has learned in his closet †.

It will be seen that I do not limit the term *inflammation of the brain* to inflammation affecting the parenchyma, or medullary substance of the

\* It is not usual to consider active inflammation of the brain, independent of effusion, as a cause of coma; but perhaps no fact in pathology rests on more unquestionable evidence. (See Martinet and Parent, Recamier and Abercrombie.) "All these symptoms (slowness of pulse, followed by frequency, squinting, double vision, dilated pupil, paralytic symptoms, and *perfect coma*) we have seen, may exist without any effusion, but in connexion with a state of brain, which is active or simply inflammatory."—*Abercrombie*, p. 54.

† Many of the French pathologists not only pretend to distinguish inflammation of the brain from inflammation of its different membranes, but they indicate, with great minuteness, the symptoms which denote the different degrees, stages, and even seats of cerebral inflammation. That these nice distinctions should be received with some degree of caution, will appear from the fact, that the highest authorities maintain, in some of the most important points, the most opposite opinions. MM. Martinet and Parent (for example) after a careful examination of 116 cases of what they considered inflammation of the membranes of the brain, had come to a conclusion, that when inflammation of the arachnoid membrane is seated on the convex surface of the hemispheres, delirium sets in early, and is the prominent and characteristic symptom; while if it occurs at the under surface and base of the brain, coma is the more usual attendant, and sets in early. M. Cruvelhier, on the other hand, affirms that the affection which he terms *meningite sous-arachnoïdienne comateuse*, when seated on the *convexity* of the hemispheres, is characterized by stupor, gradually increasing to coma, whilst headach, with increase of sensibility and delirium, are strangers to it.—See article, *Inflammation of the Brain*, in the *Cyclopaedia of Medicine*. [The question is certainly *sub judice*.—Eds.]

organ, as distinguished from its membranes; but include under that term; inflammation of the parts within the encephalon generally.

For, in the first place, we are not warranted, in the present state of our knowledge, in giving any other seat to inflammation but the vascular tissues which form, support, and involve the molecules which constitute the parenchyma of the different organs; but the vascular tissue which invests the medullary molecules, is universally admitted to be derived from, or continuous with, the pia mater\*. Inflammation of the substance or parenchyma of the brain, therefore, anatomically and physiologically speaking, can mean nothing more than inflammation of that part of the pia mater which passes into the interior of the brain, and invests its molecules. This would be no better than verbal criticism, if it could be proved that inflammation of the pia mater on the *surface* of the brain was invariably attended by one train of symptoms, and inflammation of the same membrane in the *interior* of the brain with another; this, however, is so far from being proved, that Cullen "denies the possibility of assigning exactly the seat of the different acute affections within the head, either by reference to the symptoms during life, or the appearances after death;" and therefore includes under the general term *phrenitis*, the inflammations of the different structures within the cranium, whether seated in the substance of the brain or in its investments." Pinel†, who admits that "to preserve the unity of his system it would be necessary to describe separately *cerebritis* and *meningitis*, and to cite cases in which the existence of each could be distinguished by a special train of symptoms," felt himself obliged "to include under the one head '*encephalitis*' the general history of inflammation, whether

\* See Prochasea Op. Minora, Pars. i. p. 342. Joseph and Charles Wenzel de penitior Struct. Cerebri, p. 24.

† Nosographie Philosophique.

seated in the membranes or in the substance of the brain." And lastly, Dr. Abercrombie\*, whose authority must be considered as not inferior to that either of Cullen or Pinel, admits that, "our knowledge of the subject is not sufficiently matured to enable us to say with confidence what symptoms indicate inflammation of the substance of the brain as distinguished from inflammation of its membranes." With such practical authorities in support of the anatomical objection which I have ventured to suggest to the division of cerebral inflammation according to its seat in the membranes, or in the substance of the brain, I feel that I am warranted in employing the term *inflammation of the brain* in the general sense in which it is used by the distinguished pathologists whom I have just named, at least until our knowledge of the subject is more "matured" than it appears to be at present.

[In support of Dr. Crampton's opinion are, Pinel, Stoll, Morgagni, Dewees, Abercrombie, and Mackintosh; and against are, Martinet, Serres, Parent, Rostan and Copland.—*Dict. of Prac. Med.* 1832.—Eds.]

## Hospital Reports.

ST. THOMAS'S HOSPITAL.

### MORBUS HEPATIS.

RICHARD BARRETT, aged 53, a strong muscular man, by trade a ballast gatherer, admitted October 11, into No. 2 of William's Ward, under Dr. Elliotson. States that he is a native of Cork, and has been ill three months. Complains of giddiness, unpleasant taste in the mouth, heat in his stomach, throat, and fauces, soon after taking food; great acidity of the stomach; flatulency, and frequent vomiting. Upon examining the abdomen the liver was found exceedingly large, the right lobe extending as far down

as the anterior superior spinous process of the ilium, and to the left side, extending beyond the linea alba; the right side appearing more prominent than the left. When at Cork, he states, that he used to make free with the whiskey, and drank as much as he could get. And since he has been in this country, his usual allowance has been a pint of rum daily, besides a gallon of porter, which he himself did not think much out of the way for a working man. Tongue white; bowels confined; pulse 120, hard.

*Ol. croton, gr. ½ quotidie.*

*Ung. iodinae affricand. abdomini bis die.*

*Liq. potass. hydriod. ℥ij. ter die.*

*Hyd. submurial. gr. ij. omni nocte.*

*Acid. hydrocyanic. ℥ ij. ter in die.*

*Milk diet.*

13. Acidity of the stomach less. Has not vomited since he has taken the hydrocyanic acid.

15. The dyspeptic symptoms have disappeared. Bowels open four or five times daily; tongue coated with fur, and red at the tip.

16. Bowels continue open. Complains this morning of pain in the abdomen.

The croton oil to be discontinued, and the strength of the iodine ointment to be diminished.

*Adep. ppt. ℥j. Iodinae ℥ss.*

*Liq. potass. hydriod. ℥ss ter in die.*

17. The abdominal pain disappeared.

18. Bowels relaxed; alvine dejections of a whitish yellow colour.

19. Complains of griping pains in the bowels.

*Pil. opii. gr. j. omni nocte.*

20. Mouth sore.

*Omitt. hydr. submurial.*

21. Liver much decreased, and softer to the touch. Diarrhœa continues.

*Inf. catechu. ℥iss. c. tinct. opii. ℥ x. ter in die.*  
*Rep. pil. opii.*

22. Has been troubled with tenesmus since the 18th; liver very much decreased in size; he feels very weak; pulse 88, easily compressed; tongue much the same as last report. An

\* Pathological and Practical Researches, p. 6.

injection of starch and opium has been used daily since the 22d.

*Rep. enema. quotidie. Ung. iodinæ bis die. Liq. potass. hyd. ʒij. ter in die.*

29. Still troubled with tenesmus. Liver continues to decrease in size; pulse 99, rather weak.

30. Much better; bowels open once this morning.

*Omitt. enema.*

*R. Liq. potass. hydriod. ʒijij. Tinct. opii. ʒj x. ter in die.*

Nov. 1. Since his admission, the liver has so much diminished in size, that he became alarmed, and left the hospital, fearing, as he expressed it, "that his liver should be rubbed away."

#### ROYAL INFIRMARY OF EDINBURGH.

##### VARIOLA CONFLUENS.—COLD AFFUSION; ALSO IN OTHER EXANTHEMATA.

WE have been favoured with the following highly instructive case of confluent small-pox, which was treated, many years ago, in the clinical wards of the Edinburgh Infirmary, by that truly learned and highly judicious physician, Professor Home, than whom a more successful practitioner did not exist in the northern capital during our sojourn.

The friend who favours us with the history of the subsequent case assures us that it made so great an impression on his mind, that during the last twenty-five years he has adopted the practice prescribed therein, not only in small-pox, but in scarlatina and measles, and with invariable success. He uses cold ablution during the febrile state of the exanthemata. He is well aware of the supposed danger caused by the recession of eruptions, but he has never seen it occur in consequence of his treatment.

Christian M'Donald, ætat. 12.—Nov. 22.—On the legs, thighs, the hips, right shoulder, right and left fore-arm, on the hairy scalp, the forehead, the left eyelid, and near the mouth, are a number of round furfu-

raceous blotches of a white colour, arranged in circles, and perfectly distinct. When the scurf is rubbed off, which may be done without exciting pain, the subjacent skin appears red and shining. The inferior submaxillary gland, and some of the glandulæ concatenatæ of the right side of the neck, are swelled, but not painful on pressure. The lips are tumefied; the gums rather spongy; the eyes weak and watery, and very itchy on the eyelids; face florid; the alæ of the nostrils occasionally swelled and sore; complains of pains in her head; considerable thirst; sleeps well; bowels regular; general health unimpaired.

These complaints came on suddenly two years back. Was admitted into the Infirmary last June, under the care of Dr. Spens, and was dismissed in a month, to all appearance, cured. Can ascribe no cause for them. Her mother never was affected with any similar complaints; and of the habits of her father she was ignorant. Her occupation was that of a cow-herd, and her usual diet vegetables. Has used a variety of medicines, of the nature of which she is ignorant.

*Abrad. capillit.*

23. Much thirst last night; pulse 110.

*Adhib. bal. tepid. vespere.*

*Lin. calcis bis indies, partibus affectis.*

*Utat pot. ex supertart. potassæ.*

26. Eruption no better.

*Repr. omnia et hab. bal. tepid. 2d quaque nocte.*

Dec. 13. Eruption somewhat better; swelling and inflammation of the glands at the corner of the jaw.

*Rep. omnia adhib. glandulis affect. ol. camphor, et tegantur panno laneo.*

On the 3d inst., was seized with a febrile fit.

Eight P.M. Pulse 136; heat 101. After cold affusion, pulse 130, heat 99°. Slept well.

To-day, hora nona. Pulse 136, heat 101°. After cold affusion, pulse 131, heat 99°. Felt very comfortable after the affusion. Head-ache less severe; at present, pulse 130, heat 101°. Much head-ache; tongue white; great thirst.



*Appl. g. p. et sapius indies affus. frigid.*  
*Ulat. pot. ex supertart. potassæ.*

Six P.M. Pulse 113, heat 100°. After cold affusion, pulse 126, heat 99°.

Eight P.M. Pulse 128, heat 101°. Fell asleep almost immediately after the cold affusion. Felt, during night, a severe shivering fit. An eruption came out during the night, in the form of small distinct pustules; never had the small-pox. Pulse 120, heat 98°. Slept well; bowels regular.

*Appl. sap. indies affus. frigid. calore corporis aucto.*

*Con. pot. ex supertart. potassæ.*

Eight P.M. Pulse 136, heat 100°. After cold affusion, pulse 130, heat 98°.

8th. Six A.M. Slept well. Face swollen; throat sore; pustules on the face very distinct. Pulse 96, heat 95°. Bowels regular.

*Repr. affus. frigida urgent calore.*

*Repr. pot. ex supertart. potassæ.*

Eight A.M. Pulse 108, heat 97°. Very averse to the cold affusion; tepid affusion applied.

9th. 7 A.M. Pulse 110; skin cool; slept well; pustules filling; more confluent in the face. Parts covered with the former eruption much inflamed, and pained. Some pustules on the tongue; face continues swelled; no head-ache; tongue white; some thirst; bowels very regular; fourth day of eruption.

*Iteretur affus. frigid. si calor corporis magnus sit.*

*Conr. pot. ex supertart. potassæ.*

Eight A.M. Pulse 116.

10th. Eight A.M. Pulse 120, and very weak; slept ill; skin cool; a little head-ache; some thirst; face much swollen; eyelids shut; mouth sore. Pustules on the face macerating, very distinct, and somewhat depressed; bowels regular.

*Conr. pot. ex supertart. potassæ.*

Eight P.M. Pulse 120.

11th. Nine A.M. Slept well; pulse 120; face more swelled; pustules very distinct, very prominent, and surrounded with a red inflamed base. Pustules much more numerous on the

parts affected with the herpetic eruption, and preserving very exactly the form of that eruption. Bowels natural; tongue white; some thirst.

*Injunctur enema vespere.*

*Repr. potus ex supertart. potassæ, et applicatio aeris frigidissimi.*

Eight P.M. Pulse 110.

12th. Ten A.M. Pulse 120, and rather weak. Face more swollen; pustules on the face fully suppured. Eyes closed; throat less sore; no head-ache; some thirst; clyster operated well.

*Rept. omnia ut heri præscripta, enemate excepto.*

Eight P.M. Asleep.

13th. Twelve. Pulse 100, and weak; pustules very full, comparatively suppured on the face; no salivation; face more swelled; no head-ache or thirst; bowels natural; skin very sore; averse to the acid drink.

*Hab. cereveña, pro potu ordinario.*

*Haust. anodynus ex tinct. opii xx. h. s.*

*Appl. aer frigidissimus.*

Eight A.M. Pulse 120.

14th. One P.M. At present asleep; pulse 84; slept well; pustules encrusted; one costive stool.

*Injunct. enema vespere.*

*Rept. haust. anod.*

Eight P.M. Pulse 120.

15th. Two P.M. Pulse 108; slept well; face less swollen; pustules on the face subsiding; injection operated well; one stool to-day.

*Rept. haust. anod. h. s.*

*Hab. vin. domestic. ad 3v. indies.*

Eight P.M. Pulse 120.

16th. Pulse 108; slept well; sleeps much; face not swollen; pustules disappearing; bowels natural.

*Rept. vinum et haust. anod. h. s.*

17th. Convalescent; herpetic eruption very much diminished.

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Amount of Subscriptions already received, in aid of Dr. Ryan . . .	£173	9	6
J. M'Divitt, Esq. . . . .	0	10	6
Dr. Jacob of Dublin . . . . .	1	1	0
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Books and Correspondents in our next.

# London Medical and Surgical Journal.

No. 50.

SATURDAY, JANUARY 12, 1833.

VOL. II.

## LECTURES

ON THE

## PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

Delivered at the University of London,

SESSION 1832—1833,

BY

PROFESSOR SAMUEL COOPER.

LECTURE XVII., DELIVERED NOV. 8, 1832,

GENTLEMEN,

WHEN the hour for lecture expired yesterday evening, I was noticing the causes of ulceration, but I had not quite finished the subject. The consideration of the causes of ulceration is a very important one, for, unless they be comprehended, you cannot understand the right principles, on which the treatment of sores is conducted. I mentioned, that the most frequent causes of ulceration might be said to be—inflammation; abscesses, which have burst of themselves, or been opened; wounds which have long remained unhealed; the separation of sloughs; the hurtful operation of pressure, as illustrated too often in the effects of chains on prisoners, of harness on horses, of badly padded splints on broken limbs, and of the long continuance of patients with compound fractures, typhoid fevers, paralytic affections, or other tedious diseases, in the recumbent position. Here a predisposition to such mischief is occasioned by the weakness of the system, and general languor of the circulation. The ulceration is usually preceded by sloughing of the parts affected, which are generally the integuments covering the sacrum, the lower part of the spine, the crista of the ilium, or the great trochanter. Many forms of external irritation give rise to ulceration. In the lower extremities, a frequent cause of ulceration is varicose veins; these obstruct

the return of blood through the capillary vessels, and thus bring on a disposition to chronic inflammation of the skin, which can hardly be prevented from advancing to ulceration, and the result is the production of an ulcer that is very difficult to heal, and attended with severe pain, not merely in the sore itself, but in various parts of the limb. Ulcers are frequently the consequence of diseases, which begin in the bones and ligaments. In these cases, the ulceration is generally preceded by abscesses. You will find, however, that, in some diseases of joints, one of the earliest changes is ulceration of the cartilages. But, gentlemen, ulcers frequently arise from constitutional diseases, several of which are of a specific nature, as you will find illustrated in scrofula, lues venerea, cancer, hospital gangrene, fungus hæmatodes, and chimney-sweeper's cancer. Hence one of the best and most practical divisions of ulcers is, that into *local* and *constitutional* ones; but, true and natural as it is, you should adopt it with a clear understanding, that many ulcers, which at first depend entirely upon internal causes, and are in the beginning of a specific nature, are often so materially changed, long before cicatrization is completed, that, in their latter stages, they are strictly local complaints. On the other hand, many sores which, at their commencement, are only local diseases, are afterwards changed, or influenced by some general affection of the system; and become, in every sense of the expression, constitutional ulcers.

Gentlemen, you will find, that ulcers are continually varying in their nature and appearance with every fluctuation in the state of the individual's health. If a person be attacked with fever, who has a simple healthy ulcer on his leg, or any other part of the body, secreting a due quantity of good pus, from small graulations, of a florid vermilion colour, such as are seen in the best conditioned sores, you will notice a rapid change in the aspect of the sore; it will immediately become dark or livid, and cease to pour out any other discharge, than a small quantity of thin ichor,

Sometimes the granulations either slough, or are suddenly absorbed; in other instances, they undergo a change of colour, always losing their bright red hue, and their surface being either quite dry, or else scantily moistened with a thin, bloody, ichorous matter. Under such circumstances, the healing process is completely interrupted. You may then receive it, as an acknowledged principle in surgery, that the condition of an ulcer always varies with the state of the constitution. The healthy condition of ulcers may also be considerably influenced by the kind of treatment applied to them; thus, by improper dressings, excesses in diet, and too much disturbance of the part, a healthy ulcer may be converted into one of the very worst description; and the most indolent one turned into a disease characterised by its irritable or phagedenic nature.

In cases of ulcers, the *prognosis* generally depends, first upon the nature of the predisposing and exciting causes, and on the facility, or difficulty, with which they may be removed; 2dly, on the kind of parts attacked, whether of great importance or not, in the animal economy, or whether capable of easily repairing their injuries; for, you will find, that the effects of ulceration in joints, or cartilages, are not repaired, with the facility exemplified with regard to ordinary textures; 3dly, on the patient's constitution, age, and mode of life; 4thly, on the extent of the ulcer—this fact must be sufficiently evident; 5thly, on its peculiar nature—thus, a venereal sore may generally be easily cured, because we know a medicine that has considerable power over venereal affections; but it is very different with scrofulous sores, because we are not acquainted with any medicine, possessing the same kind of power over scrofula, which mercury has over the venereal disease; in short, we know nothing, that will quickly rectify that peculiar state of the constitution, with which a scrofulous sore is intimately connected. As for a cancerous sore, I believe, that it can never be cured, or, that, at all events, it is incurable without some operation or process, that has the effect of destroying or extirpating the cancerous tissue. With this understanding, I think, it would not be altogether correct to assert, that such a sore is absolutely incurable, for sometimes sloughing of the parts will take place, and effectually cure the disease, by destroying the tissue in which it is situated, or of which it is composed. There is an old woman now living in Great Ormond-street-yard, or who was living there very lately, about 80 years of age, both of whose breasts were formerly cancerous, and both have been cured by the sloughing process. There is indeed yet considerable induration and prodigious disfigurement of the soft parts; but no pain, nor inconvenience remains. The ulcerations are all cured, and, though the mammary glands have both sloughed away, the patient may be deemed to be cured.

Ulcers on the trunk, or near the source of

the circulation, generally heal in less time than others further from the heart, or, situated on the limbs; and every surgeon is well aware, that ulcers on the arms commonly heal with much greater expedition, than such as occur on the lower extremities. The cure of ulcers on the legs is much hindered by the depending position of the parts, which retards the return of blood through the veins, checks the freedom of the circulation; and thus has a most disadvantageous effect on the healing processes. Then the granulations often undergo an unfavourable change, and from being of a florid colour, become of a dark or purple hue.

Gentlemen, the process, by which ulcers heal, is exactly the same as that which brings about the cure of suppurating wounds; it includes the important subjects of *granulation* and *cicatrisation*, which will particularly claim our attention, when we consider the treatment of such wounds as cannot be healed by the first intention. Therefore, I shall merely observe at present, that, as soon as the process of ulceration is checked, and the preternatural activity of the absorbents of the part is reduced, the secreting arteries recommence their functions sufficiently to establish a process of reparation in which the cavity, the chasm produced by the action of the absorbents, is filled with granulations; and changes take place in them, by which new skin is formed, and a considerable quantity of the surrounding old integuments drawn over the sore. In this manner, less new skin is required, which is always a great advantage, the old skin being constantly stronger, and less likely to break out again, than what is a new production. You are then to understand that the granulations contract, and are absorbed, by which the margins of the sore are drawn nearer together, and the old skin extended over some of the part, which was previously ulcerated. This subject, however, will be more fully noticed, when I come to suppurating wounds.

With respect to the treatment of ulcers, the chief indications are to diminish, or remove, the causes which have given rise to their formation, and to let the patient have the advantage of a suitable diet and regimen; of rest, and a judicious position of the part; of pure air and cleanliness; circumstances of the greatest importance, both in the treatment of ulceration and in that of mortification; and, lastly, to let him have the benefit of such medicines and dressings as the circumstances of his case may require. These are the leading points, to which you should attend in the treatment of ulcers in general. With regard to the removal of the exciting cause, if it be still in operation, the necessity of attending to this indication is so manifest, that it hardly needs any comment from me. Suppose an ulcer were to originate from, and be kept up by, the presence of a piece of dead bone directly beneath it, how could you expect it to heal while such portion of bone were in the situation described?

Then, if an ulcer were to be caused by scurvy, it would be quite useless to attempt to cure it, without endeavouring to rectify the peculiar derangement of the health, with which the local complaint is connected.

I mentioned, in the last lecture, the effects of scurvy in causing the absorption of cicatrices, and of the callus of bones, which had once been fractured but had been a long time united again. We cannot be surprised then, at our inability to cure scorbutic sores, as long as the constitutional disorder remains, on which they essentially depend. When we know, that scurvy is capable of actually converting scars into ulcers again, and of disuniting parts of bones which had been united for years, we must perceive what an impediment it may be to cicatrization. But, gentlemen, in order to give you some idea of the universal derangement of the system, produced by scurvy in an aggravated form, I invite your attention to the preparations before us. They exhibit portions of muscle, between whose fibres strata of blood are extensively deposited. We know that, in scurvy, there is great tendency to hæmorrhage, and to the escape of the blood from its vessels; but for the blood to be thus deposited between the fibres of the muscles, is a curious occurrence, and one that is not commonly noticed in the accounts of that disease.

Some other sores, if not produced, at least are kept up by disorder of the digestive organs; and then the principal indication must be to improve and regulate the state of those viscera. It is far from being my wish, gentlemen, to make you suppose, that every sore requires internal remedies; healthy ulcers may require the administration of little or no physic during the whole of the treatment, the simple regulation of the bowels being perhaps all that is needed; but indolent, irritable, and phagedænic sores, and such as are connected with a wrong state of the constitution, are sometimes more essentially benefited by internal remedies, than by external applications. Medicines and regimen may then be of great importance. With regard to every description of ulcer, one useful maxim is, always to keep the surrounding skin clean, and to prevent any of the discharge from lodging, or drying upon it. If this plan be neglected, the integuments will often be so irritated, by the matter, as to inflame, in which event, the ulcer will not go on well, the healing process will be materially interrupted, and, not only may cicatrization be stopped, but ulceration renewed and extended.

Gentlemen, all ulcers may be divided into three classes. I have already mentioned one division of ulcers, namely, that into *local and constitutional ones*; but, now, I shall notice another, namely, that into *healthy, unhealthy, and specific*; the last are, of course, unhealthy ulcers; but they are of a peculiar kind, and, therefore, it is better to arrange them as a third class.

In the first class of ulcers, there can of

course be only one kind: we cannot imagine more than one sort of *healthy ulcer*, any more than we can suppose more, than one species of healthy inflammation. The *healthy* is frequently called the *simple ulcer*; it is characterized by freedom from all diseased action and disposition.

The second class, or that of *unhealthy sores*, comprehends various kinds, the *indolent*, the *irritable*, the *phagedæmic*, those connected with varicose veins, and many others, depending upon disorder of the digestive functions, and various definite and indefinite derangements of the health.

The third class, or that of *specific ulcers*, comprehends *venereal, cancerous, scrofulous, and scorbutic* sores, and several others, to which I shall have occasion to refer as I advance further in this course of lectures. In surgical books, you will find ulcers designated by various phrases, so many as to create confusion, and perplex the student, rather than enlighten him. As instances, I may mention the terms *sinuous* ulcers, *fiatulous* ulcers, *carious* ulcers, *inflamed* ulcers, *sloughing* ulcers, and *fungous* ulcers; these only relate to certain complications of sores, and should not be made the ground of a division of them into so many species, for any sort of sore may be complicated, so as to claim the names here specified.

The first class, or *healthy ulcers*, or, as they are sometimes called, *simple ulcers*, may be known by the small size, florid colour, firm consistence, and pointed shape of their granulations, which resemble minute cones and are not much disposed to rise above the level of the surrounding skin. This latter circumstance is one reason why they heal so favourably, because when granulations rise too high, that is, above the level of the adjoining integuments, they mechanically obstruct the growth of the new skin over them. The pus of these ulcers is white and thick, and does not adhere to the granulations, like that of many unhealthy ulcers. When the granulations have risen to the level of the skin, a remarkable circumstance is observed to take place at the margin of the sore, a kind of film is there formed upon the granulations; it is a deep red, very fine, smooth, semi-transparent pellicle, which is, in fact, to become new skin, and afterwards covered with a white matter, that is, the new cuticle. You have within the white boundary of the sore, the delicate, transparent, deep red film, which, in its turn, becomes opaque and white itself. Such are the appearances of a healthy sore, or one in which the process of cure is going on favourably in a person of sound undisturbed constitution. I have said, that the granulations are of a florid red, or vermilion colour, which denotes a free and vigorous circulation in them. This colour of the granulations is not, however, always the same in every position of the limb; for when an ulcer is situated on the leg, and the part is suffered to hang down, or is put in the perpendicular position, the granulations will be

come less florid, and of a darker colour, in consequence of the return of venous blood within them being retarded. In this condition, John Hunter conceived, that the blood in the minute arteries might also assume the dark colour of that which fills the veins.

The treatment of healthy ulcers is simple; one excellent principle is for the surgeon not to interfere too much with the well directed operations of nature, not to be too officious. The surrounding skin should be kept clean, and soft lint applied to the surface of the sore, to absorb the redundant secretion of pus. The lint may be covered with any common ointment, as that of *spermaceti*, *calamine*, or *marshmallows*. The design of the ointment is to prevent evaporation of the fluid part of the pus from the surface of the ulcer, which would occasion a scab, or render the lint hard, adherent, and irritating. The lint should never be applied over the edges of the sore, because if it were, it would frequently become adherent to the tender film of the new skin in the process of formation, and, in taking it off, it would tear this delicate production, give pain, and sometimes bring on a return of ulceration.

Gentlemen, I have already explained, that one part of the process of cicatrization is effected chiefly by the granulations, by means of which the old skin is drawn over the part, so as to render much new skin unnecessary. Now it must be evident, that the process in question, I mean that, by which the skin is made to extend over the ulcer, must be interrupted, if the granulations are allowed to become too high. Hence, it is sometimes necessary to repress their further growth, and indeed to diminish the height, which they have already attained, because, in this state, they form a mechanical impediment to the extension of the skin over the ulcer. For this purpose, the nitrate of silver is commonly employed, and, in using it, the main skill consists in not applying it over the delicate, shining, semi-transparent, deep red film, which I have described, but to the granulations, within this delicate pellicle, and over which we wish the film next to extend itself. The caustic may also be applied in the centre, if the granulations should be very high in that situation: there it can do no harm. Some surgeons use the nitrate of silver; others the sulphate of copper; I, generally, prefer the first, which I believe is the best caustic for promoting cicatrization. On this point I fully coincide with the late Professor Delpech, who published some clinical observations, proving that the nitrate of silver promotes, with wonderful efficacy, the contraction of the granulations, and, in this way, acts very beneficially in quickening the process, by which the edges of the old skin are drawn over the sore.

Then, gentlemen, the healing of all sores, healthy and unhealthy, is powerfully influenced by attention to the position of the part, which should be kept elevated, or placed horizontally, in order that the venous blood may not have to return against its own gravity.

Another principle is, to maintain the part in a state of repose. When the lower extremity is the part affected, the patient should keep in bed, but the arm may have all the benefit of quietude, by placing it in a sling. But, supposing the patient were unwilling to remain in bed for a sore leg, then you should employ a roller; for thus you may take off the weight of the column of blood in the large veins, which would retard the circulation in them; and you may afford as much steadiness and quietude to the ulcerated skin, as can possibly be obtained, without rest in the recumbent posture. But, gentlemen, a roller will be of no use, unless it be methodically applied. The great principle to be observed in its application is, to let it press equally on every point of the limb; partial pressure will, generally, do no good, and is worse than no pressure at all. Hence, in bandaging the leg, surgeons apply the roller to the whole of the limb, beginning near the toes, and going up to the knee. You will observe patients, whose bandages are put only on the portion of the limb near the ulcer; but this method never answers. When you see it adopted, you may be sure that it is not by the advice of a good surgeon, who always makes the bandage press uniformly and equally on every part of the limb. This maxim requires, that the bandage should be of considerable length, and, for the leg of an adult, you will find the length of six yards, and two inches and a half in breadth, about the proper measurements.

The next ulcers, to which I solicit your attention, are those called *irritable*. I have explained, that sores always partake of the nature of the constitution; if it be irritable, the sore will necessarily be irritable. In various impaired states of the health, an ulcer will also assume an irritable character;—thus, a person may have a common sore, which may become an irritable one in consequence of any disturbance or decline of his general health. According to my views, there is a decided difference between an irritable and an inflamed ulcer, a position which is sometimes disputed. On this point I fully agree with Professor Gibson, of the United States. He considers, that the irritable nature of sores does not depend upon inflammation of them, but rather on the state of the constitution. The truth of this doctrine seems to be illustrated by an observation made by Sir Everard Home, who says, “you frequently cannot know an irritable sore by its mere appearance; and perhaps its nature is first detected, when you venture to try some stimulating application, or to make pressure on it: then the sore, instead of being improved by the treatment, undergoes a total change for the worse; the granulations are absorbed, or parts of the surface of the ulcer slough.” Now, it seems to me, that if there were no difference between an irritable and an inflammatory ulcer, or (what is the same thing) if irritable ulcers were always accompanied by inflammation, we should constantly

be able to distinguish them by their appearance. But, this is not the case. At the same time, many irritable sores are marked by peculiar appearances: their edges are sharp, jagged, and, as it were, undermined; their bottoms have concavities of different sizes in them, seemingly as if no attempt at granulation had been made; the discharge is usually thin and ichorous: the pain is excessive; the disposition to bleed remarkable, so that when the sore is very lightly touched with a probe, blood immediately flows.

Then, gentlemen, you will find, that irritable ulcers have a disposition to slough; and, when the slough separates, new granulations will sometimes form: but soon afterwards, these also slough; and thus the disease may go on for months, until the patient is quite tired out, and loses all confidence in the plans of treatment adopted. It seems, that local circumstances occasionally have influence in rendering ulcers irritable, because when they are situated over the shin, over the ligamentum patellæ, or over the lower end of the fibula, they are generally irritable. The treatment consists in enjoining repose of the part, and in the use of soothing applications. You may begin with bathing the parts lightly with a warm decoction of poppy heads, and applying a bread-and-water poultice, or one made with the liquor plumbi acetatis dilutus. To either of these cataplasms we may sometimes add, with advantage, some of an aqueous solution of opium. At first, you can seldom venture on anything stronger, than these applications. But, whatever treatment you adopt, you will not succeed, unless the part be kept at rest in the horizontal posture. Sometimes much benefit is derived from applying a solution of opium, containing from five to ten grains of opium in every ounce of distilled water. With many irritable ulcers one application agrees best, which we should not, *a priori*, expect would have the desired effect; I mean, the nitric acid lotion. This remedy is extensively used by Sir Astley Cooper. I remember being consulted by an admiral, residing at Southampton, who was under the care of my friend, Mr. Maul, of that town, for a most annoying irritable ulcer of the leg, for the cure of which numerous applications and internal plans had been long tried in vain. We had a communication with Sir Astley, who recommended the nitric acid lotion, containing fifty drops of the acid in a quart of water, and with this application the ulcer soon healed. Frequently the lotion should be used of greater strength, and be joined with a little opium. It is perfectly certain, that all irritable sores are rendered worse by pressure; bandages, therefore, should never be used. When the surrounding parts are inflamed, topical bleeding is advisable; but here the case is complicated with inflammation. Under such circumstances, even general bleeding may be necessary for patients who are plethoric, and have indulged at table, and lived well. Many irritable

ulcers are accompanied by disorder of the digestive organs; here internal medicines are essentially required; attention being paid to diet, and the digestive functions regulated. In particular, purgatives and tonic medicines, or the compound infusion of gentian, with sulphate of magnesia, or the liquor potassæ, according to circumstances, may be prescribed.

Then, gentlemen, you all know the confidence of the late Mr. Abernethy in the blue pill with sarsaparilla, aperient medicines, and a regulated diet, for the cure of all local diseases, connected with derangement of the digestive organs. Narcotics are generally indispensable, on account of the excessive pain; especially opium or hyosciamus; costiveness being always obviated. When the constitution is much impaired and debilitated, you should prescribe light tonics, such as the infusion of cascarrilla, or the sulphate of quinine with diluted sulphuric acid. Thus, gentlemen, it appears that the constitutional treatment of an irritable sore should be adapted to the particular state of the system; in some instances, bleeding may be right; in some, an alterative plan; and in others, a tonic one.

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## CLINICAL LECTURES

AT THE

MEATH HOSPITAL, OR COUNTY OF  
DUBLIN INFIRMARY,

DELIVERED BY

DR. GRAVES, M.R.I.A.,

*King's Professor of the Institutes of Medicine  
in the School of Physic, Dublin.*

(Corrected by himself.)

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SESSION 1832-33.—LECTURE V.

HEMOPTYSIS.

GENTLEMEN,

WE shall now commence the consideration of hæmoptysis. Let us first consider it with reference to the different parts of the vascular tissue of the lungs, which are engaged in its production, and afterwards speak more accurately of the symptoms attendant on each. It may be well to commence with the source of hæmoptysis, because there are some misconceptions respecting it, and I do not think that it has been clearly laid down in books written on this subject; I shall, therefore, devote more time to the consideration of some points of the morbid anatomy of this disease than I usually do in a clinical lecture. Other circumstances, which you will find sufficiently described in written treatises, I shall pass over briefly. In order to comprehend fully the peculiarities of hæmoptysis, it is necessary that you should be intimately acquainted with the circulation of the lungs. Here you have not only the simple circulation, as in other parts, but,

as in the liver, we have the vena porta for the formation of bile, and the hepatic artery for nutrition, so in the lungs we have the pulmonary arteries carrying blood, which is to be aerated, and the bronchial arteries for the support and reparation of their substance. You are aware, gentlemen, that it has been lately shown that the lung is but a large gland, whose ducts are the bronchial tubes, and whose secreting surface is that of the air cells. There is this difference in the sources from which blood is furnished to the lungs; the bronchial artery is small, and its blood red; the pulmonary artery immensely large, and carrying dark blood, which is to be aerated; the bronchial arteries follow the course of the bronchial tubes, interlace with and ramify over them, enter them, and are distributed in great profusion to their mucous lining. On the inflammatory action of these arteries, the redness and injection of the mucous membrane, observed in cases of bronchitis, depends. The bronchial arteries, also, send branches to the cellular membrane, connecting the air cells, and to the surface of the lungs, but it is for the mucous membrane, lining the bronchial tubes, the greater part of their blood is destined\*. You know, gentlemen, that if we examine the structure of the lungs, besides their vascular tissue, we observe they consist chiefly of ramifications of the bronchial tubes leading to air cells. These cells may be represented as so many minute vesicles, each communicating by a minute aperture with an extremely small ramification derived from the bronchi. This fact has been shown and described by Reisseisen. The vesicles which are placed at the extremities of these minute branches, and the branches themselves, present certain differences, the vesicles presenting a greater degree of tenuity, and a strong resemblance to serous membrane. These distinctions, between the structure of the air cells and that of the bronchial tubes, cannot be easily recognized in the very minute tubes of the bronchial ramifications, but become more evident as we ascend towards the larger bronchi. The use of the air vesicles is to aerate the blood in the lungs, and it is on the parietes of those vesicles, or cells, the ultimate branches of the pulmonary arteries are distributed.

When we come to speak of discharge of blood from the lungs, and to consider the phenomena it presents, we find that it may take place from the minute extremities of the bron-

chial, or of the pulmonary vessels. The seats of the ultimate ramifications, as I have before mentioned, are completely distinct, and it is important to recollect that they are so. Inject the bronchial arteries with as much care as you possibly can, and I say you cannot, by doing so, inject the vessels which ramify on the air cells, nor can you, on the other hand, inject the vessels which are distributed to the mucous membrane of the bronchial tubes from the pulmonary arteries. Of this I am perfectly sure, for I have tried the experiment myself unsuccessfully, and have examined with the greatest care the beautiful preparations in the museum of Dr. Townsend, and neither he nor Dr. Houston could show me one instance of the bronchial mucous membrane having been injected from the pulmonary artery. Even the finest injections, used by Dr. Houston, at my request, in the lungs of dogs, failed to effect what would indeed be easy of accomplishment, if engorgement of the system of the pulmonary artery was capable of producing bronchial hæmorrhage. There is, to be sure a system of capillary vessels in the lung, through the medium of which an indirect communication is established between the bronchial and pulmonary arteries and the pulmonary veins. Dr. Law, of this city, in the article "Hæmoptysis," in the *Cyclopaedia of Practical Medicine*, has handled the subject of the relative distribution of the vessels in the lungs with his usual ability. I cannot, however, see that Reisseisen, whom he follows, justifies him in considering hæmorrhage from the bronchial tubes as a consequence of hæmorrhagic engorgement of the system of the pulmonary artery. "We readily account for its frequency," says Dr. Law, "by the facility with which an injection is found to pass from the pulmonary into the bronchial artery." Reisseisen, it is true, points out that the bronchial and pulmonary arteries anastomose with the same system of capillaries on the surface copiously, and more sparingly in the cellular texture of the lung, but his description likewise proves, that the bronchial mucous membrane is exclusively supplied with red blood by the bronchial arteries. It is indeed true, that we can force injection from the pulmonary artery into the bronchial tubes, but even in such cases, the bronchial mucous surface is uninjected, and the injection finds its way therefrom into those tubes by other channels than the bronchial artery, or its ramifications, which would indeed be a retrograde course. I am, therefore, of opinion, from the reasons above stated, that when hæmoptysis, from the engorgement of the system of the pulmonary artery, takes place, it is in consequence of the direct effusion of blood from the branches of the pulmonary artery, which ramify on the air cells, and that the blood expectorated on such occasions has nothing to do with the bronchial mucous membrane, or bronchial arteries.

When we recollect the peculiar texture of the lungs and the quantity of blood which is

\* Reisseisen remarks, that by far the greater portion of this blood is returned, not by the bronchial veins to the right side of the heart, but by the pulmonary veins to the left side. Is this peculiarity owing to this blood being dissimilar to other venous blood, in consequence of being aerated in the bronchial tubes? or is it because it may be mixed with impurity with the great mass of aerated blood returning from the lung?

sent through them at each stroke of the heart; when we consider the excessive tenuity and delicate structure of the air cells, which when the lung is inflated by inspiration (and that is the very moment when most blood rushes through it), imparts to the touch the feeling of an elastic but almost gauze-like and cellular substance, we are surprised to find that cases of spitting of blood are not much more frequent. The lung, however, is an organ so important to life, that if there was much danger of hæmorrhage from its tissue, it would be a greater error in our structure than nature was likely to commit. Cases of this kind are comparatively rare, and we do not meet with them every day in our hospitals. Compare with the patients afflicted with dangerous and copious hæmoptysis the number of cases of bleeding from the nose, hæmatemesis, discharges of blood from the bowels, and hæmorrhage in general, and you will find that the lungs are not more liable than other parts to sanguineous effusions.

When speaking of the vascular arrangements of the lungs, we mentioned that the bronchial mucous surface is supplied with blood from the bronchial arteries, and the air cells from the pulmonary. Hence we can divide these discharges into two kinds, those which come from the pulmonary, and those which are derived from the bronchial arteries; and these will be found to be distinct, not only in their pathology, but also in their characters and the symptoms by which they are attended. We shall go through this minutely. Let us suppose that the pulmonary artery is disposed to bleed, what will take place? In a few moments you will see the immense difference between this hæmorrhage and that which comes from the bronchial arteries. Its ultimate ramifications, which are distributed over the air cells, get an hæmorrhagic tendency, and blood escapes from them in two different directions into the air cells, or into the cellular tissue which connects them. That portion of blood which gets into the air cells will also get into the bronchial tubes, and may be spit up. That portion which gets into the intervesicular cellular tissue has no such exit: there it must remain and become coagulated and solidified. Now, as either of those effects may happen, we have spitting of blood, or effusion into the cellular texture, without hæmoptysis. It is to the union of these two diseases the term *pulmonary apoplexy* has been applied, in which we have blood effused into the cavity of the air cells, and outside their cavity into the cellular tissue. Now, what is the result of sanguineous effusion from the pulmonary branches? In the first place, the blood is black, as you can perceive when it is spit up. It is also clear, that if this blood be detained for some time in the air cells and bronchial tubes, it will become coagulated, and be spit up in clots. Many of the worst cases of spitting of blood are attended with this symptom; and it is quite a mistake to suppose,

as you see it mentioned in books, that blood expectorated from the lungs should be florid and frothy. You are told, gravely, that you can distinguish blood discharged from the stomach from that which is discharged from the lungs, by the difference of its colour, consistence, and the presence or absence of air bubbles. No, gentlemen, you cannot. If you see blood spit up which is dark and coagulated, and, from stethoscopic examination, have reason to think that it comes from the lungs, you will be convinced that the effusion is from the pulmonary artery. I do not mean to say, that when blood comes from the pulmonary artery it is always black and clotted; but I assert, that it is so in a great majority of cases; and in many cases of pneumonia, we find the sputa partake more of the venous than the arterial character, a circumstance which indicates its formidable source. It is obvious, that the blood spit up in those cases may also have a florid tinge where it has been imperfectly aerated, by the imperfect action of air bubbling through it before it is expectorated\*.

There are some hæmorrhages, also, from the bronchial artery, which are very copious; but, generally speaking, where there is much cough, constriction of the chest, and fever, it is the bronchial mucous surface which is affected; and the spitting of blood which, in such cases, comes from the bronchial arteries, is but scanty, and is seldom dangerous. The blood will be found to be effused from small spots, as in epistaxis, and the quantity is generally small. You will, however, sometimes find an instance of a person spitting up, very copiously, blood of an arterial colour; for it must be borne in mind, that a very small surface of mucous membrane may often bleed most copiously, as is seen in some cases of epistaxis, when the blood issues from an insulated and small spot. Such cases of copious bronchial hæmorrhage occur occasionally, are unconnected with bronchitis, and depend on some peculiar hæmorrhagic tendency.

We have thus drawn a distinction between these two kinds of hæmorrhage; let us trace it further. Suppose you have a case where blood is effused into the cellular tissue of the lungs; the blood so effused is immediately submitted to a peculiar action of the animal

\* This subject requires further investigation; for not only is it possible, as is stated in the text, that black blood may be changed in colour, after effusion into the bronchial tubes, by the rapid bubbling of air through it, but also it is extremely probable, that if arterial blood oozes out very slowly from the bronchial surfaces, and remains for any considerable length of time in the air passages, mixed with thin mucous secretion, it may, before it is expectorated, change its hue, and become dark, as happens where red blood is long exposed to the action of the secretions of the alimentary canal, e. g. in melæna.



economy. It is first, by coagulation, separated into two portions, serum and crassamentum. The serum is rapidly absorbed, and as soon as this is accomplished, the crassamentum becomes solidified, and remains there with its colouring matter, as you have it represented in this plate of Cruveilhier, where you perceive, as it were, balls in the substance of the lung, of a solid consistence and red colour, formed by the colouring matter and clot. The first effect of effusion of blood into the cellular tissue is a tendency to solidification, one chief consequence of this disease, which has not been noticed by those who have written on pulmonary apoplexy. Nature, gentlemen, is anxious to stop the effusion of blood, as, in this instance, it threatens that life which she watches over, at all times, with so much care. Now, what is the consequence of this solidification? First, all the air cells of the part are closed by the pressure of this coagulum, that portion of the lung which has been bleeding becomes impervious to the air, and this circumstance alone is sufficient to arrest the hæmorrhage. And why is this the case? Because the blood which flows through the pulmonary arteries cannot pass into the veins, unless in its passage it be aerated; a knowledge of this fact is necessary. It is this which, at the first moment when the infant respire, causes the blood to rush through the pulmonary vessels in ten times the quantity it did before birth. If you asphyxiate an animal, or by any means put a stop to the process of aeration, you will find that in proportion as the air in the lungs becomes deficient or impure, the blood ceases to pass from the right to the left cavities of the heart, because it cannot pursue its natural course unless it be properly aerated. Hence, when a part of the lung becomes impervious to the air, the passage of the blood, so far as that part is concerned, will cease, and consequently the tendency to hæmorrhagic effusion\*. You see, gentlemen, in this case, two causes in operation to prevent effusion of blood, mechanical pressure, and such a state of that portion of the lung which had been bleeding, that less blood goes to it in consequence of its no longer performing its share of the respiratory function.

A great deal has been written about the ulterior effects of blood thus effused. It is

\* By the *passage of the blood*, is here only meant the rapid and unimpeded circulation from the pulmonary artery into the pulmonary veins, for it is evident that a part of the lung, impervious to the air, may be the seat of sanguineous engorgement, as happens in the posterior parts of the lungs of those who die after a long agony, or in the various stages of pneumonic engorgement and hepatization. The experiments lately published by Dr. Marshall Hall on hybernation, and which have thrown so much light on this obscure subject, do not appear to support the opinion brought forward in the text.

evident that when the effusion takes place into the air cells, it may be spit up and produce no further harm; and if the patient recovers without any effusion into the intervesicular tissue, there is no trace of the disease. The danger, therefore, arises from the quantity of blood poured into the cellular texture, which, by obliterating the air cells (if the extent be considerable) may destroy the functions of the lungs, and in this way produce death, as you may have observed in the case of hæmoptysis above stairs, where the cessation of the spitting of blood was a bad symptom. The disease was going on for some time, and not confined to any particular part, but extending over the whole of one of the lungs, and you can now conceive the reason of this man's death. It was because by effusion and solidification to a great extent he was deprived of the use of his lung. Yet you will find instances where a person has more than half the lung filled with a clot of this kind, and still survives; and you may observe parallel cases in the prolonged life of some patients who labour under organic disease of the lungs. This is generally seen where the quantity of blood circulating in the whole system is small; for when the power of aeration is diminished, it is necessary that the quantity of blood which passes through the lungs should be reduced below its average amount, or its course will be arrested.

Now, gentlemen, where we have solidification of the lung, and obliteration of the air cells, from such effusions, what is the consequence? Sometimes we have sudden death from dyspnoea, sometimes the fatal termination is of a slow character. It is stated by some authors, that blood of this kind acts as a foreign body, as an irritant, and excites inflammatory action. Others say that the effused blood not only produces inflammation, but also gangrene and softening of the affected portion of lung. With respect to this, I may be permitted to express very strong doubts. We do not see effusions of blood in other parts of the body attended with such consequences. I would ask any one, who has seen a case of ecchymosis in the conjunctiva, where this membrane is raised high over the eyeball by an immense clot of blood, whether this clot, though in such close juxtaposition with an extremely sensitive organ, ever produces inflammation? How often have we seen blood effused from wounds, or contusions, remain quietly in its new situation, and be absorbed, without producing any inflammation? But, with respect to this question, the admission of all pathologists, that many such solid portions may exist in the lungs together, without the least appearance of inflammation in the pulmonary substance immediately around them, seems quite conclusive. Thus, in Cruveilhier's plate, now before you, the section of the lung showed that the cells were inflamed quite to the very edge of the various solidified portions, although they had existed for many days before death. Again: do we not know, that even in the brain itself

blood may be effused and sudden paralysis produced, and that the patient may quickly recover, and a clot remain in the cerebral substance without producing inflammation. It is true that blood effused into the lungs is, in many cases, attended by pneumonia, and that extravasations in the brain are frequently accompanied by softening. This I do not deny; but I think that both are simultaneous effects of the same cause, and that in the one case pneumonia and sanguineous effusion, and in the other extravasation and ramollissement, are only different parts of the same process.

If a person recovers after the discharge of a large quantity of blood into the lungs, what is the consequence? If the constitution be sound, and the hæmorrhagic tendency does not recur, it is probable that this portion may be submitted to the action of the absorbent, and ultimately rendered healthy. This I believe may happen, for the phenomena of absorbed hepatization in pneumonia gives it probability, though I have not seen it verified. I have, however, ascertained satisfactorily, that this portion of the lung may remain solid for a considerable length of time, without producing any particular symptoms. Two cases of this condition of the lung, remaining in one instance for a year and a half, and in another for three years, without subjecting the patients to any inconvenience whatever, have come to my knowledge, and, after death, (which was caused in each by a different disease) I have been able to detect those solidifications by dissection. It has been stated, that persons who have portions of the lung solidified, are liable to phthisis. Where scrofula exists, tubercles may be precipitated into suppuration from this cause; but where the constitution is not scrofulous, the consumption which follows solidification of the lung is certainly not tubercular. I remember having attended, some time ago, a young man who had an attack of pulmonary apoplexy, and who afterwards got all the symptoms of phthisis except diarrhœa; I watched this case through all its stages, month after month. On examining the lungs after death, I could not detect a single tubercle; the matter was extensively diffused through the cellular tissue, constituting that disease to which the name of suppurating pneumonia has been given. In the case of a young gentleman residing in Gardiner-street, who was attended by Mr. Colles, the symptoms above mentioned were present, and it was generally thought that he was dying of tubercular consumption. I was called in to see him, and, on inquiring into the history of the case, I gave it as my opinion, that it was not tubercular consumption, but only extensive suppurating pneumonia, an opinion which was borne out by the necroscopic phenomena. You see, therefore, gentlemen, that a man may live for a considerable time with a portion of his lung solidified in consequence of this disease, or that he may get pneumonia, which may go on to inter-

stitial suppuration, and present all the symptoms of tubercular consumption; or, if his constitution be scrofulous, he may get true tubercular phthisis. It is obvious, that in a person whom this disease would render obnoxious to pneumonic inflammation, if scrofula exists, you will have the tubercular instead of the pneumonic action developed; for in scrofulous habits you will find that every cause which produces irritation, or a tendency of blood to the chest, produces also a tendency to consumption. Dr. Stokes and I attended, some time since, a gentleman who had pleuritic effusion in the right side of the chest, with engorgement of the lungs and dyspnea. During the course of the disease he got tubercles, and where, do you think? Not on the side where the pleuritic effusion existed, but in the upper part of the left lung. You should not be surprised at this; it was a consequence of the disturbance of the respiratory functions, and you may be assured that every thing which deranges the pulmonary circulation in scrofulous persons, has a strong tendency to the development of tubercles.

There is a question in Laennec's work, to which Dr. Law has also alluded in his treatise on Hæmoptysis, in which it is asked, can spitting of blood be considered as the cause of consumption? To this I will answer, that I have seen more than one case of pulmonary apoplexy in which the patient died of the first attack, and yet not a single tubercle could be found in the lungs. It may certainly produce a tendency to consumption, but is not a necessary cause of it. The same may be said of bronchial hæmoptysis. Any one who has witnessed the dissections of the lungs of tuberculated patients must have frequently observed, that tubercles are accompanied by an inflamed state of the bronchial mucous membrane. It is notorious also, that this state of the mucous lining, with the hard dry cough which it occasions, is one of the first symptoms of tubercles in the lung; and we therefore find, in many instances, that bronchial hæmoptysis is a consequence and not a cause of tubercle.

On Saturday I shall conclude the subject of hæmoptysis, and then proceed to make some observations on swelled leg, after fever, a disease which bears considerable analogy to phlegmasia dolens, and which we are treating in a manner differing from that usually pursued in such cases.

[The succeeding lecture appeared in our last, in consequence of its number having been mistaken for that prefixed to this.—Eds.]

CLINICAL LECTURE,  
ON PNEUMO-THORAX,  
DELIVERED  
BY MR. GUTHRIE,  
AT THE  
WESTMINSTER HOSPITAL,  
December 8, 1832.

GENTLEMEN,

THERE was a case in the Hospital, a few days ago, which I hope you have all watched with the attention it deserved. If you have not, you will not fail to reap the reward, which inattention and ignorance usually bring with them. The patient, William Laird, was the groom of a friend of mine, Lord Charles Churchill, and, from the circumstance of his having been sent into the hospital by myself, we owe the opportunity of examining the body after death; the absurd regulations of the governors preventing any such inquiries, except with the permission of the dead person's nearest friend, or relative; so that if a man dies without a friend, he cannot be opened because there is no one to give the permission. I sent him into the hospital in August, with inflammation of the chest, of which he got well, and was discharged, but, having a relapse, he came back, and was re-admitted, under Dr. Roe, in September. I requested the clinical assistant, Mr. Neale, to give me an extract from the public clinical book of the case; he has, however, sent me, I see, Dr. Roe's private case book, in which the case is minutely detailed in his own hand; this is, of course, private, but if any of you wish to know the whole history, Mr. Neale will show it you from the public book. I did not see him until Saturday, the 20th of October, when Dr. Roe requested the opinions of Mr. Lynn, Sir A. Carlisle, and myself, Mr. White being absent. The man was lying on his back, breathing with some difficulty, but not so much as might be expected, from the results of the case. The left side was evidently fuller and rounder than the right. The interstices of the ribs were much less prominent than on the other side. On placing the hand on the chest, two things were distinguishable, the absence of the pulsation of the heart from its usual place; and the sensation communicated by an œdematous swelling of the whole affected side, which was so remarkable as to form a prominent symptom. On applying the ear to the chest, which is, in these cases, preferable to the stethoscope, no respiration could be heard on the anterior part, or side, but a sound from within was distinctly audible, which Laennec has called "tintement métallique," and likened to the fall of a shot into an empty china cup. On percussion, the sound of the fore part of the chest was quite sonorous, like an empty

cask, whilst that of the opposite or sound side was dull, but as the percussion was continued down towards the back, the sound also became dull, like that emitted from a full cask. The pulsation of the heart was distinguishable, as at a depth from the sternum, and was only distinct at the right side of it. It is impossible to have more strongly marked symptoms of the disease called pneumo-thorax, or of air and fluid in the cavity of the chest. This disease must have existed from the earliest era of mankind; it was often seen and mentioned by authors, but Itard first noticed it in an especial manner, and gave it the name of pneumo-thorax in 1803. The Editor of the *Dictionnaire des Sciences Médicales* objected to the word pneumo, and wished to alter it to pneumato, but Laennec, who had adopted it, makes a valiant defence for the pneumo, as signifying air, and being sufficiently explicit. So, gentlemen, such of you as are Grecians, may fight it out, more particularly as I see Dr. Elliotson has lately taken the field in favour of the *pneumato*. On Sunday, the 21st, I punctured the left side with a very small trocar, and drew off forty-two ounces of a whey-coloured fluid, resembling serum, a considerable quantity of air escaping first through the cannula with a very audible sound. The patient was immediately and greatly relieved. Let us now review the important features of this case, with reference to those you may hereafter meet with. I have seen great numbers of them, many occurring from wounds, but I did not understand them thoroughly, or at least as well as I do now, until after I had read Laennec; and none of you can understand them unless you will take the trouble to cultivate the use of your ears. You will best understand the deviations from a natural state, by examining persons who are suffering from marked disease of the heart or lungs, and then by comparing the sounds with those from a young and healthy person, you will easily learn to distinguish those which are natural from those which are diseased; but you may rely upon it, you must work, if you wish to obtain this knowledge; it does not come by intuition, and it requires hard and constant work, I assure you, to acquire even a moderate degree of information on every point connected with it.

There are two states requiring an operation; one, when one side of the chest is principally filled with air, the other when it is principally filled with fluid, or perhaps equally so with both. I believe some of the external symptoms are different in these two states. The first thing I observed in our patient was the fullness and roundness of the left or affected side, when compared with that of the other, which, when there is no apparent deformity, shows something peculiar, and is a presumptive sign of distension. The interstices, or parts between the ribs, which, on the right side, were distinctly marked hollows, were scarcely observable on the affected one, being the second presumptive sign. These have been always considered as

marked symptoms of distension. The œdema of the integuments has also been noticed; but, I believe, there is something yet to be ascertained with respect to this symptom, inasmuch as it is not always present. I punctured the left side of the chest of a surgeon I attended with Dr. Johnson some years ago—Mr. Cornish, of Lambeth—and evacuated a quantity of air, with complete temporary relief: but in his case there was no œdema of the integuments. I have seen others in which it was absent, and some in which it was more or less present, but in none more than in the present instance. I suspect, that when the cavity of the chest is principally filled with air, that it does not take place, nor when the fluid is slowly effused, as a product of chronic inflammation; but I believe it will always be present when the cavity is principally filled by an effusion, the result of acute inflammation. When this inflammation has followed the extravasation of a large quantity of blood, the œdema on the back part may be more or less of a reddish colour. The cause of the occurrence of this œdema is, then, gentlemen, a debatable point. It strikes me, that it is analogous to the appearance which nature exhibits in deep-seated abscesses in other parts of the body, the contents of which she is endeavouring to get rid of. An œdema of this kind, and often much more marked, is observable over the part, and is a very prominent symptom. An incision effectually relieves nature in both cases, and the symptom is one which shows that some such relief is imperatively demanded.

The metallic tinkling (*tintement métallique* of Laennec) is not, I think, quite understood. I compare it, in these cases, to a thing you have, I dare say, all heard, and which children play with, called a Jew's harp. It appears to me to be a sound as nearly like it as possible, and quite as long continued, and as musical. It is better heard by the ear applied close to the chest, than through the stethoscope. It is not always sounding, but at short intervals, sometimes when the patient breathes full, or coughs; at others, when he is quiet. It is supposed, by all pathologists, to depend entirely on the passage of air through a hole in the lung into the cavity of the thorax, which also contains a fluid. This I presume to doubt. I do not deny the facts of the air, the hole in the lung, or the fluid, but, I believe that, to produce the sound of the Jew's harp, the air in the cavity must be greatly compressed, and that it essentially depends upon it. This is, I think, proved by the circumstance of the metallic sound ceasing when an opening is made into the cavity of the thorax. I am aware that Laennec says he has heard it when the cavity of the chest was open; but I suspect an error on this point, as I have carefully attended to it many times, and never could distinguish this sound, until the external opening had been closed long enough for the air to become compressed, when it was again perceptible. In

Mr. Cornish this was very remarkable. Whenever the metallic tinkling was observable, his breathing was oppressed. Opening the external wound gave him immediate relief, and removed the metallic tinkling.

My patient, Mr. Stapleton, who was shot in the right side of the chest, in February last, was another well marked instance of it. The first inflammatory symptoms were subdued at the expense of one hundred ounces of blood drawn from the arm, and as much as four hundred leeches could draw from the chest. He got so much better as to be able to be moved from Long's hotel, in Bond-street, to his lodgings, in Mount-street. Here he took it into his head to wash himself naked in a third or back dressing-room, which brought on several severe fits of coughing, in one of which the left mediastinum gave way, as well as the pleura covering the left lung, and air, and perhaps matter, escaped into the chest. It is possible all this might have happened if he had not exposed himself and caught cold. The pleura covering the lung appeared to adhere to the pleura costalis, just as far as the left nipple, and about an inch below it in places, but no respiration could be heard inferior to this, or sound, except that of the Jew's harp, whilst all this part was very sonorous on percussion, sounding like an empty cask. The respiration behind, at the root of the lung, close to the spine, could be heard, as in all other cases of the kind. It was so in that of William Laird. The expectoration became purulent, and the existence of an ulcer in the lung, which communicated with the cavity of the chest, seemed too obvious to admit of doubt. Believing that the metallic sound arose from compressed air, and which caused the great distress in breathing, my attention was at once turned to the wound, the channel of which I suspected to be impervious, from the granulations growing up in its course. A free exit to the compressed air was essential; I therefore prepared two things, the one a small, flat, exploring trocar and cannula, the other a very small elastic bougie, covered with a bit of dry sponge, after the manner of a sponge-tent. This I first introduced into the tract of the wound, as far as it would go, and awaited the result, being determined to puncture the left side to let out the air if it had not succeeded. In two hours he was in so much distress as to believe himself to be dying, and the time was come for action, that he might at least die *secundum artem*. The Jew's-harp sound was most distinct. I drew out my bougie and sponge, which was much swollen, and was followed by a discharge of matter, and of air in bubbles. The relief was immediate, the tintement ceased, my patient breathed freely, and my trocar disappeared from the scene for ever. Finding that I could re-produce the distress, and the tintement métallique, by introducing the bougie and sponge into the wound, I exchanged the bougie for a catheter, the eye of which pro-

jected beyond the sponge, and prevented any inconvenience. This he soon learned to manage for himself; and as his lungs were naturally sound, the ulcer slowly healed, the lung became again distended with air, the fluid in the cavity was absorbed, and the channel through the left side of the mediastinum, I presume, also healed. The ball remains lodged, I believe, on the left side of the sternum, just within the mediastinum, and just over the heart. If it had gone through the chest, he would long since have been quite well. At present he is in good health, paying visits around the country, but the wound discharges a little. I do not know whether it is advisable to recommend, with Sir Lucius O'Trigger, in the *Rivals*, that gentlemen should stand fair to the front in duelling, and be shot clean through one side of the body, instead of making as small as possible an edge, by standing sideways, and running the risk of being certainly killed by the ball penetrating both sides; but this I do know, that there is neither charity nor humanity in the manner of choosing the pistols at present adopted. The balls are so small, that the hole they make is always a source of inconvenience in the cure; and the quantity of powder is also so small, that it will not send the ball clean through a moderately thick gentleman; it therefore sticks in some place where it should not, to the extreme disadvantage of the patient and the great annoyance of the surgeon. These things really should be altered, with the present diffusion of knowledge. It is bad enough to be shot by your adversary, but it is worse to know that you lose your life through the kindness of your friend, in not putting powder enough into the pistol to send the ball clean through you\*. Sir R. Crauford was killed, at the little breach at Ciudad Rodrigo, in this way; the ball (French balls are 20 to the pound, ours about 16) passed through the back part of the flesh of the left shoulder, and entered the chest in the arm-pit by so small a slit, that the penetration of the cavity was doubtful. After his death, which occurred within a few days, the ball was found lying loose on the diaphragm. If I had known as much then as I do now, and had learned to bring my ears to my assistance, I think I should have found out, in due time, to have made a hole on a level, or nearly so, with the floor of the diaphragm, and have taken it out, when his life might have been preserved. In some future war, the instructions I have given, and shall yet leave, will, with God's assistance, enable you to do more, I hope, than I and others who have preceded you.

The sonorous sound, or that of an empty cask, informs you to what extent the chest is

\* The late Sir Charles Bamfylde lost his life, in consequence of the ball sticking on the inside, between his ribs, instead of coming through.

filled with air. The dull sound, or of the full cask, as the patient lies on his back, of the height to which the fluid rises. As you change the person to the erect position, the sounds change also, and the diagnosis is more marked. I punctured the chest in the case before us far back from the sternum, that the fluid might run out easily afterwards, which is an essential point; for if it does not run out as the patient lies on his side, the prospect of cure is not so great as if it did, and the opening should be large. In the first instance, I punctured with a very small trocar, which I passed through the skin, and parts subjacent, into the chest. The next morning I enlarged the opening, by passing in the same direction, on the upper edge of the rib, a common trocar and cannula, used in tapping. This makes a roundish sort of a hole, which does not so readily close, and if you do not shift the position of the skin further than to feel the upper edge of the rib underneath it, the operation is done in four seconds, and the opening will be direct. If kept open for the first day or two by a short piece of elastic catheter, it will not afterwards close without sufficient intimation. On the right side the liver frequently rises high up, or rather does not descend, before the fluid, and an opening should not be made lower than the upper edge of the seventh rib, and particularly if it be not made far back. If it be done on the fore part of the chest, it should not be lower than the sixth. In the case of Laird it might have been done lower than it was, without disadvantage. He was much relieved by the operation during the day of the 21st. On the twenty-second, on introducing the large trocar, seven ounces more fluid came away, more turbid than that first drawn; and, on the fourth day from the opening, the discharge was evidently purulent. The heart returned to its natural position, and some hopes of recovery were entertained; it soon, however, became obvious that he was sinking, and on the 6th of November he died. On opening the chest, the left lung was seen shrunk, and lying close to the spine; on inflation, the air passed out readily in several places, and particularly from two openings on its anterior surface, one of the size of half-a-crown. The pleura costalis was much inflamed and coated with lymph, as well as the pleura pulmonalis. The whole of the left lung was full of tubercles and abscesses. The right lung was also full of tubercles, in a less advanced state; and there was one abscess at the upper part.

From the consideration of this and of other cases, I am led to believe that an operation will not be ultimately successful, where the lungs are greatly diseased; but in wounds of the chest, it may be of the greatest importance; and I hope what I have said will lead you to see the absolute necessity in cases, either of disease or of injury of the chest, of using your ears, and will incline you to give to auscultation that attention it deserves and requires.

REMINISCENCES  
OF AN  
ARMY MEDICAL OFFICER.

PART I. CHAPTER VIII.

I TRUST the readers of this "ably conducted Journal," as it was the other day, most properly designated by a contemporary, will not quarrel with a veteran for fighting his battles o'er again; and that full allowance will be granted, on their part, in requital for the copious showers of amusement which he intends for them. Nothing shall be set down in malice; and, although mock dignity may be deserving of ridicule, the true honour and respectability of the profession will, on all occasions, meet with the consideration which is due. Medical topics are seldom proper vehicles for wit or humour, but medical men are not unfrequently fair subjects of either; and, as the writer himself may be exposed to this ordeal, he must admit the right of every boy who may be bitten by a dog to bite the dog again\*, provided retaliation go no farther than "tooth for tooth."

Having completed my attendance on all the lectures delivered in the Edinburgh University, I was now handed over to the professor of botany, who delivered his odds and ends in an apartment within the Botanic Garden. I cannot say much in praise of this establishment, as respects either the *utile* or the *dulce*; and I understand that, since my time, it has shifted ground. I was led to believe, that the then actual occupant of the *rural cathedra* had got into what is vulgarly denominated "the wrong box," for he might have shone (such was the story) as a chemist, while, as a son of Linnæus or of Jussieu, he was but so so.

To substantiate this observation, I must cite the fact of his generally

\* The idea is taken from a humorous caricature.

coming to the lecture-room three-quarters of an hour after the appointed time, and sometimes not at all; but, on the other hand, he laboured under infirmities fully sufficient to account for these defalcations. There was also an irritability about the venerable gentleman, which frequently was displayed in attempts (often vain) to scold the gardener for producing a wrong specimen, and thus we were amused upon many occasions; the boys unable to preserve their gravity, while the judicious were vexed and grieved.

I formerly alluded to Dr. Gordon; and this is the appropriate time and place to mention him more particularly. He is now no more; but *was*, probably, one of the most promising and popular lecturers of his day. He professed to instruct in anatomy and physiology; and delivered his discourses in the same apartment with Dr. Thomson, Professor of Surgery to the College of Surgeons, and now in the University, of whom, also, I was a pupil. Had John Gordon (M.D.) been spared, confident am I that he would have become a luminary; but it pleased Providence to abbreviate his career, when he was approaching the zenith of his expectation.

If we compare the three teachers of anatomy then established (it may be said) in Edinburgh, we must agree in the general conclusion—and, for my own part, I agree with it, from having had every opportunity of close observation, as a pupil of them all—that Monro *tertius* did not lack industry, to the best of his abilities; that Barclay not only possessed science, but practical knowledge; though, as a lecturer, no man of taste or *euphonious* characteristic could hear him without getting the tooth-ache. As to Gordon,—let me quote Juvenal, and declare, that (to me) he was

"Amicus jucundus in via, cum vehiculus."

Had I never studied anatomy under any other teacher, I should have, myself, been a distinguished anatomist.

*Quare? Propter* I must have loved the science for the sake of the

teacher. As it was, I loved it for the sake of itself, in spite of some of my masters.

I have now but a few shreds and patches to furnish, connected with this portion of my history. I may remark that I was the pupil of every lecturer in Edinburgh, both within and beyond the precincts of the University. Let me be indulged (not for the sake of vanity, but) on account of a sort of sacred or pious feeling towards those who certainly discharged their duty towards many thousands besides myself, and formed a race of physicians who are not only a credit to their school, but who are received with open arms throughout the civilized world. Such treatment I have myself uniformly, and times without number, met with; although, perhaps, one of the least deserving it.

Let me, therefore, here exhort medical students, of *whatever school*, be it University or not, to enter upon their studious pursuits with preconceived reverence for their instructors. I know that parents and guardians will feel obliged to me for this advice, but I have a clause to add to it—let them emulate and encourage one another; let them aim even at teaching or improving one another; for this will pave the way for the future improvement of themselves; and after much experience, and great opportunities of improvement, as well as some attempts to add to my original acquisitions, I have no hesitation in declaring, that the best instructor a man, after initiation, can find, is HIMSELF.

I had intended that the present chapter should have seen me start from Edinburgh, but the history of my graduation will take up more room than the fag end of an article can well afford; be it, therefore, postponed, for the purpose of stating a curious fact in medico-academical history.

There was a Royal Medical and also a Royal Physical Society connected with the University, composed not of students only. Where, or how, they got the chartered authority to

style themselves *royal*, Lord Bute, or Lord Melville could best tell; but so it was.

The Medical flourished, for all the aristocracy belonged to it, and they annually chose four presidents from among the best dressed and the most pretending. In the poor Physical (which, by the way, had by far the best *salon d'assemblée*) the business was infinitely better conducted, though the attendance was comparatively thin. They also were misguided enough to have four presidents; and, it might be said that, in either establishment, these were but *change for a penny*.

Perceiving the absurd manner in which these young gentlemen were conducting business, I made up my mind to attempt the establishment of a third society, under the title of the "Medico-Chirurgical." We met within the precincts of the College. I was secretary the first year, vice-president the second, and president the last. The diplomata creating me all these great officers are still in my possession. We adopted a common seal, without letters patent; we wrote all our transactions in big books; and we rejected an overture to coalesce with the Royals. In my departing speech, or oration, delivered to them from *the throne* (after I was elected to the dignity of the chair), I exhorted them not to yield to this flattering approach on the part of a body, sickly though chartered, and the proposition was declined.

Our society flourished far beyond the expectation of myself—the Founder. It lasted many years after I was forgotten at Edinburgh. Among the members we had Oudney, Lizars, Lyall, and many who have since risen to great eminence and renown; but of their merits I shall speak in another place.

Our plan was to incorporate examinations, with papers and discussions upon them. We had five or six appointed examiners in the various branches of our studies, who entered upon their duty after the visitors had retired. The object was to prepare

ourselves for the ordeal before us; therefore we had an examiner in anatomy, &c.; one in surgery; another in the practice; a fourth in the theory of medicine. I was the fifth; and my department was midwifery, I having in my possession a complete course of Dr. Hamilton's lectures.

About two years ago (I date from December 1832, and I left the society, under flying colours, in 1810), I was at a dinner party of a caste exclusively medical; two respectable doctors of Edinburgh were also present, and among other topics of conversation they fell upon the death of a society to which they had, while students, belonged. It appeared that this society had, in respect of funds, been in a very flourishing state, but had got meagre as to members; it died, in fact, a natural death in their time; and the few members, whom it was possible to assemble, resolved to apply the surplus funds to the laudable purpose of defraying the expenses of a dinner.

I listened with some degree of gratified attention to this discourse; and then informed the gentlemen that I had been at the *birth*, while it appeared that they had been in *at the death* of the first Medico-Chirurgical Society of Edinburgh\*.

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#### ESCULAPIAN REFLECTIONS.

##### No. I.

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“Look before you leap.”

*Vulgar Proverb.*

THE happy moments of Christmas, a season of almost universal holiday, give us, whose mind is unwilling to adapt itself to the festivities of that period, an opportunity of casting an eye of criticism over some few circumstances connected with the preparatory era of the medical profession. We think we are happy in such an opportunity, for the first division of the medical *season* is drawing to a

close, when some students, prevented by their engagements to do so before, hasten to London to “enter” to their lectures; to such students we will address a few words of caution, and to them also the improvements, which we shall hereafter suggest, we think, will be particularly applicable.

What golden dreams are those of the tyro, when he is just upon the eve of casting away the toil and drudgery of an apprenticeship, to enter upon that more important division of his professional education, which is pursued in this metropolis; when he bids a long and remorseless farewell to the pestle and mortar, to perform the important process of “walking the hospital!”

The importance of that new undertaking, the contemplated pleasures of a residence in London, the joyous freedom of “being his own master,” are reflections whose ecstatic moments impose many an unweighed dose of Dover's powder or blue pill upon his master's patients.

The day of the tyro's departure is at hand. He is soon to change the monotonous and dull scenes of a country town for the bustle, the grandeur, and the beauty of the “Modern Babylon.” He is soon to break asunder the fetters of restraint that are imposed upon him by that tyranny, that contempt too much and too generally exercised by surgeons towards their pupils. And now comes that important question, to what medical school is he to go? His master, perhaps, twenty years ago, studied at Guy's Hospital, too frequently a circumstance admitting of no hesitation in the mind of the tyro, in regard to his destination. And what are the dazzling beacons which would induce him to steer his bark to that haven? Are there not Key, the lithotomist, and Sir Astley Cooper, Bart., the consulting surgeon! Yes, the consulting surgeon. Ask not, think not, tyro, what means the consulting surgeon of a London Hospital, of which the very assistant-surgeon is daily in the habit of riding in his carriage to

\* There has been one established under the same name since.



see his patients, and receiving from them his guineas! As what? As consulting surgeon\*. St. Thomas's Hospital, on the other hand, exults in all the rays of brilliancy that emanate from the vigorous mind of Dr. Elliotson, and the calculating, cool, polished, yet sarcastic intellect of Mr. Green. St. Bartholomew's Hospital borrows lustre from the name and versatile and inquiring genius of Mr. Lawrence; and, although the light may have been for ever extinguished, the phosphoric splendour of the great name of Abernethy stands over the portal of that venerable edifice, like the bright sun upon the dial-plate, which, as it urges on the shadow of the index into darkness, tells the fleetness of time, and the nothingness of genius. And what has King's College but a name? Yea, even more than a name. Bend thy steps thither, tyro, when the finger of the "Destroyer" indicates the eighth nocturnal hour, on Mondays and alternate days, and there wilt thou see Mr. Green (that popular professor) breathing out his eloquence to his "toga'd" disciples, himself not less "togiferous," nor less proud of his toga, clad in the varied colours of the rainbow, and buried in a maze of drawings; and while the fruits of a learned mind leave his distorted lips in measured succession, the contemptuous sarcasm for others does not forget to gambol there. Thou hast seen the patronage of the London University, thou hast heard of its distinguished professors, and it cannot fail to form an ingredient of that indecision which weighs upon thy brain.

It is the familiarity of all these names, unavoidably eulogized and distinguished in the periodical journals, that bewilders the student upon his first *Gradus ad Parnassum* from the humble domicile of his master. Hav-

ing arrived in London, guided by no judgment of his own, no unbiassed advice of others, and lost in a maze of bewilderment, he is directed, in his choice of a school, by its association with a great man's name, who holds, perhaps, in it an office scarcely more than a sinecure. But, alas! poor tyro, he is not long ere he discovers his mistake. He may be compared to the silly moth, that flies to the glare of the candle and perishes in its flame.

Our remarks, then, resolve themselves into this very important question, "How is the young student to remedy the evil which we have mentioned?" To this question we would return the following answer:—"He should leave the country, divested of all those airy visions of pleasure which we have set forth, as being peculiar to young men under such circumstances; which pleasures, a residence of three months in London will tell him do not in reality exist. He should leave the country with but one object in view: that object should be, to acquire knowledge; to qualify himself for the arduous duties of the most responsible, the most mysterious, the most useful, and the most learned profession incidental to man; to prepare himself to stand amongst the most distinguished members of that profession, who, by their indefatigable zeal, and by their zeal only, have cultivated good, but, in many cases, by no means inordinate talent, with such success, that they have received for their reward the confidence of their fellow-men, and, consequently, wealth and happiness. We repeat, the student's sole object should be to acquire knowledge, despite the formal and arbitrary regulations of the Society of Apothecaries\*; which certainly stand

\* We must confess, that we cannot look upon this fact of Sir A. Cooper being advertised as consulting surgeon in the annual prospectus of the lectures of Guy's Hospital, in any other light than "a trap for the unwary."

\* Their worships have evinced a presumption of an exact similarity of intellect and disposition pervading the whole human race—which we need not refute—or they would not have made it a law, that each student should study certain branches of his profession, at precisely the same periods of his *matriculation*, and in precisely the same manner. Would it not have been sufficient to have demanded

in the road to the temple of science, "stumbling-blocks, and rocks of offence." Lastly, out of the twenty-one days prescribed by that august body, for young men to make their choice, the tyro should spend one or two days at each medical school; he should inquire into its system, hear its professors, and carefully mark its merits and defects; which he should methodically arrange in his mind. Then he should, as it were, individually weigh the comparative advantages of these several schools, and seat himself upon the sinking scale. At the expiration of these twenty-one days, the student should not allow great names to pervert and mislead his judgment; for where it inclines, *there*, we are convinced, will the student do most good, and in that place should he fix his "local habitation." We have exceeded our limits in these remarks, and therefore we conclude. Our next shall consist of observations not directly connected with the foregoing remarks. We hope, gentlemen, you will not refuse either a corner in your Journal.

A PUPIL.

London, Dec. 27, 1832.

#### CYANURET OF MERCURY IN SYPHILIS.

LAST July, Dr. Parent presented a paper to the Academy of Sciences in Paris, on the effects of cyanuret of mercury in venereal affections, which was the subject of the Report of Barons Larrey and Boyer. The cyanuret of mercury, very slightly soluble in water, and decomposed only by animal substance, will be, on this account, preferable to deuto-chloruret of mercury (corrosive sublimate). Long and successful experience has shown, that all the symptoms of syphilis disappear very soon, and without bad

only qualification, and left the time, place, and mode of study, to the judgment and discretion of the student! The next regulation will enforce the necessity of students living upon *gruel*, we should suppose, to keep their brains clear!

VOL. 11.

effects, from its use. The twenty-seven observations published by Dr. Parent, have clearly proved that the cyanuret of mercury possesses the advantage. The authenticity of the cases in which it has been used, occurring, for the most part, in the large hospitals, and under the observation of celebrated physicians, accustomed to observe with caution, is sufficient to authorize the use of cyanuret of mercury, and that, in future, it should be considered as a valuable remedy.

The use of this medicine was discovered by MM. Parent and Boutigny in the following manner. A physician was in possession of a secret remedy, the success of which, in venereal affections, had struck them; he administered it in the form of pills, preparing them himself. He applied to M. Boutigny, an apothecary, for the different extracts and salts he made use of in the composition of his remedy. He used a quantity of Prussian blue, red oxide of mercury, muriate of ammonia, extract of boxwood, and aconitum napellus. By analysis, there was found hydrochlorate of ammonia, oxide of iron, and cyanuret of mercury. MM. Boutigny and Parent thought that the cyanuret alone possessed the anti-syphilitic properties of the secret remedy; they made pills, solution, pommade, and tincture, of this salt, and began their therapeutic experiments, which had the happiest results. M. Parent has given an account of them in his essay, *Bulletin Général de Thérapeutique*, &c.

#### CHOLERA MEDALS.

WE mentioned, some time ago, the intention of striking a number of medals in France, for the purpose of being issued to those individuals who distinguished themselves in the cause of humanity during the late epidemic. A list of 1000 names has, we find, been drawn up, and the medals are likely to be issued from the Royal Mint in the course of a short time.

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**London Medical & Surgical Journal.***Saturday, January 12, 1833.*

## ADULTERATION OF MEDICINES.

THOUGH the laws of this country empower the Royal College of Physicians and the Apothecaries' Company to inspect the shops of apothecaries, this duty is almost entirely neglected, or performed in a manner which affords no protection to the public. The inspection of the medicines of regularly qualified apothecaries is totally unnecessary, but should be immediately extended to the manufacturing chemists and druggists. There is no control over these, though the sale of their drugs is their only concern as traders; hence it is found almost impossible to procure genuine medicines, and the consequence is, the destruction of thousands of human beings. Every day's experience demonstrates the inefficacy of medicines, of undoubted power in a genuine state; and every physician, with a spark of philanthropy in his bosom, deplors this monstrous evil. Nevertheless, there is no remedy for this state of things; the health and lives of the community are sacrificed to an incredible extent; the fame of the most eminent practitioners of the healing art is tarnished, because their prescriptions fail to effect relief, or to cure diseases. So great is the mischief caused by the adulteration of medicines and by empirics, that even the ablest of our divines denounce it, as the following animadversions clearly prove:—

“But when men without skill,—without education,—without knowledge either of the distemper, or even of what they sell,—make merchandise of the miserable,—and, from a dishonest principle, trifle with the pains of the unfortunate,—too often with their lives,—and from the mere motive of a dishonest gain,—every such instance of a person bereft of life by the hand of ignorance, can be considered in no other light than a branch of the same root—It is murder in the true sense;—which, though not cognizable by our laws,—by the laws of right,—every man's own mind and conscience must appear equally black and detestable.

“In doing what is wrong,—we stand chargeable with all the bad consequences which arise from the action, whether foreseen or not. And as the principal view of the empiric in those cases is not, what he always pretends,—the good of the public—but the good of himself,—it makes the action what it is.

“Under this head, it may not be improper to comprehend all adulterations of medicines, wilfully made worse through avarice.—If a life is lost by such wilful adulterations,—and it may be affirmed, that, in many critical turns of an acute distemper, there is but a single cast left for the patient,—the trial and chance of a single drug in his behalf;—and if that has wilfully been adulterated, and wilfully despoiled of its best virtues,—what will the vender answer?”

Such was the language of Sterne, in one of his Sermons; and it corroborates the validity of our repeated strictures upon the subject at the present period. It is, therefore, obvious, that some change is required in the laws relating to the preparation of medicines, and to the practice of the profession. If the laws enacted, more than three centuries ago, be unsuited to the present state of society, we can

see no reason why they should not be improved. It is idle to imagine, that the corporations of physicians, surgeons, and apothecaries, who are armed with some authority, will view the distracted and degraded state of the profession with an impartial eye—it is not agreeable to human nature that they should; but we ask the public press and the legislature, is human life unworthy of protection? Is a wise reform to be effected in all our institutions except the medical? Is it either wise or politic that, in a country like this, the public health should be destroyed, and the dignity of medical science depreciated to the lowest degree? We should hope not; and therefore we entreat the press to exert its unlimited power in the cause of medical science and humanity. We advise its conductors to apply to themselves and their families, the abuses which we have exposed, and then view them throughout society. If this be done, we shall no longer complain of apathy on their parts: they will be the strongest advocates of our cause, and incalculable good must follow.

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SATISFACTORY OPERATION OF THE  
ANATOMICAL BILL.

WE have great pleasure in stating, that since the Right Hon. the Secretary of State for the Home Department enforced the new law impartially, the study of medicine has been wonderfully accelerated. A few weeks ago, the number of bodies supplied to all the London schools was thirty a-

month; at present it is one hundred and sixty. The expense of procuring each body, including that for a respectable burial, is 2*l.* 10*s.* Great praise is due to the Secretary of State, and to Dr. Somerville, the Inspector of Anatomy, for effecting a fair and ample supply of bodies; and no small satisfaction and pride must be felt by Mr. Dermott and his numerous pupils, who, by their memorial proposed at the Albion Tavern, brought about such a favourable result. London can now compete with Dublin and Paris in facilities for teaching anatomy; the rising part of the profession will have much better opportunities of acquiring anatomical knowledge; and their acquirements will be of a much higher character than heretofore.

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MEDICO-BOTANICAL SOCIETY.

EARL STANHOPE, PRESIDENT, IN  
THE CHAIR.

*Tuesday, January 8th, 1833.*

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NATURAL HISTORY OF EGYPT AND NUBIA.—  
CHEMICAL ACCOUNT OF IODINE.

MR. BARRY O'MEARA was proposed as a Fellow of the Society.

M. Rifaud exhibited to the Society three hundred drawings, illustrating the zoology, the natural history of Egypt and Nubia, with botany. These he had completed after a residence of twenty-two years in different parts of Africa. They represented an infinite number of fishes, animals, and plants, most of which have not hitherto been known. He handed round prospectuses, by which it appears that the author intends to publish the result of his arduous observations in five volumes, and a folio atlas, containing three hundred plates.

The Noble President complimented M. Rifaud on his zeal and indefatigable industry, and returned him a vote of thanks for his politeness in exhibiting his drawings to the Society.

Mr. Everett, Professor of Chemistry to the Society, then delivered a luminous lecture on iodine and hydriodate of potass. He cited several authorities in Germany and France, in attestation of the curious and important facts, that iodine exists in appreciable quantity in sea-water, in combination with various minerals and metals; it was also detected in certain fishes and mineral waters; it is generally supposed to exist only in marine plants. The able lecturer then experimented on iodine in its various combinations, and succeeded so successfully as to excite repeated applause from a most numerous meeting. He remarked, that he made numerous experiments on the hydriodate of potass of commerce, and though he had not completed his labours in consequence of illness, he was prepared to prove, that it was generally adulterated, and could not be depended upon by physicians. In his opinion, this abuse ought to be corrected. [This fact has been repeatedly proved in vol. i. of this Journal.—REP. See our Leader.]

Mr. Everett described the ordinary modes of preparing the remedy in question, all which he explained in the clearest manner; but that which he found the most accurate was the following: place eight ounces of distilled water in a phial, and 500 grains of iodine, 200 grains of iron-wire, brightened by having been previously drawn through sand-paper, and divided into short pieces. This mixture is to stand for three or four days, when it will assume a dark greenish colour: it is then to be filtered, and 428 grains of bicarbonate of potass added. This process affords a perfectly pure hydriodate, which is soluble in alcohol, while the adulterated article will leave a residue on being mixed with this fluid. Here, then, is a simple test for a most valuable

remedy. The lecturer described the mode of detecting the hydriodate in the smallest quantity. He made several experiments on the subject. One of these deserves especial attention. He took 6 lbs. of common salt, and barely covered them with water; he added half a grain of the hydriodate of potass; the solution was filtered, and a pint of fluid obtained. The addition of a solution of starch to this produced a slight blue colour. Iodine, in solution, was discoverable by the same test. Numerous other interesting experiments were made for a similar purpose. The lecturer avoided allusion to the remedial powers of iodine and its preparations, as these would be fully described at the next meeting after the anniversary, by his colleague, the Professor of *Materia Medica*.

Dr. James Johnson was admitted a Fellow of the Society; and immediately after, the Noble President addressed the meeting, on the association of so able and scientific a physician as Dr. Johnson, a gentleman who had done inestimable good to medical science by his writings, and who justly stood at the head of his profession as an experienced physician.

Dr. Johnson returned thanks, and expressed his inability to find appropriate terms to describe his feelings for the high eulogium passed upon him by the Noble President and the Society. He felt that his humble talents did not deserve it, but should endeavour, as far as in his power, to benefit a society, whose objects were so praiseworthy.

The Noble President then announced that the Anniversary Meeting of the Society would be held on the 16th inst., and at the subsequent one, the learned Professor of *Materia Medica*, Dr. Ryan, would deliver a lecture on the Remedial Powers of Iodine. The Society then adjourned.

[This Society promises to be one of the best attended in the metropolis. The meeting-room was crowded, and

several eminent individuals were present. It is the only Pharmacological Society in this country, and now flourishes, since the removal of certain obnoxious persons, who injured it materially. The most celebrated continental botanists are among its members; and it is deeply to be regretted, that an imprudent act of an individual, which was contrary to the unanimous wish of the Society, but which was carried into effect by a party, should influence some of the most eminent of our national botanists to take offence at that which was never contemplated by the Society at large. It is, however, to be observed, that the Society is not purely botanical, but is virtually pharmacological, and enrolls among its Fellows some of the most eminent physicians in this country — Sir Henry Hallford, Sir James M. Grigor, Sir William Burnett, Dr. Bree, &c.; and however anxious it might be to possess certain eminent botanists among its honorary Fellows, it proceeds more auspiciously since it very properly extended its objects to general therapeutics.]

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#### MEETINGS OF THE ROYAL COLLEGE OF PHYSICIANS.

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THE meetings of the Royal College of Physicians will commence on Monday 28th instant, when a paper will be read from the pen of the President, which, no doubt, will illustrate some great practical point. The meetings will be held the last Monday evening of each month until the end of June.

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#### CHAIR OF NATURAL PHILOSOPHY IN EDINBURGH.

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THERE are several candidates for the vacant chair of natural philosophy, in the University of Edinburgh; but one of the first was Sir David Brewster. By some unaccountable cause, the

Town Council, contrary to the wonted nationality of North Britain, offered the professorship to Sir John Herschel, whom all the world well knew as on the point of leaving England for the Cape of Good Hope. Circumstances have transpired which leave not the shadow of a doubt, that the offer was not made until the certainty of refusal was quite determined. The natives of Scotland are proverbially partial to each other, and we believe this is the first instance in which a professorship in Modern Athens was offered to an Englishman. We are quite certain there was an object in view in this unusual preference. But, if the Provost and his satellites were sincere, why did not they offer the vacant chair to Mr. Babbage, who was a candidate with Sir John Leslie on a former occasion. Is it because it was probable that he would accept it? Now Brewster and Babbage are philosophers highly esteemed in the scientific world, either of whom would do credit to the appointment. There are several other candidates who possess strong claims, and the most celebrated of these are Dr. Olinthus Gregory and Sir D. Brewster. As these gentlemen are Scottish, we have not the slightest doubt but one of them will be appointed. The shallow manoeuvring of the Edinburgh Baillies might be passable in by-gone times, but is too glaring for the present.

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#### ANNUAL MEETING OF NATURALISTS IN GERMANY.

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AT the close of last year the number of naturalists assembled at Vienna amounted to 900. The section of geology furnished many brilliant names. They received many marks of attention from government; the royal carriages were placed at their disposal, and a certain number from each section were entertained by Prince Metternich and the Minister of the Interior.

### Rebivctus.

*The extraordinary Case of Sarah Hawkes—one of extreme Deformity—cured by a Method founded upon simple Principles.* By EDWARD HARRISON, M.D. F.R.A.S. Ed. J. Robins, Bride-court. pp. xviii.—78.

FOR the indefatigable and meritorious, the benevolent and learned physician, under whose auspices the subject of this narrative had the happiness to be ultimately placed, we trust that the day of well-merited reward is fast approaching. Few members of our profession have laboured with greater assiduity, or applied extensive opportunities of observation to better purpose, than the (formerly) persecuted gentleman who now comes again before the public, though not in the usual *direct* manner. This we say from a motive of *duty* towards a liberal and disinterested member of the cloth: for, in the instance of the present publication, he not only seeks no advantage for himself, but has been at all the pains, and has incurred all risk, as to expense, &c., in order to crown his success, in restoring the patient to health and vigour, by presenting her with a valuable and appropriate *douceur*, which (if we are not widely mistaken) will be highly acceptable and profitable upon her recovery from protracted suffering. The book is avowedly "published for the benefit of the patient," who is a young girl in indigent circumstances, but now deemed capable of gaining a livelihood, if furnished with the means of outfit for some situation, the duties of which may not be laborious.

Dr. Harrison, however, has contributed greatly, in this unpretending publication, to the clear understanding of the nature and importance of deformities in the spinal column. Here we have "the extraordinary case" indeed, of a child, who, at the age of 11 or 12, was knocked down by a

blow, inflicted on the posterior surface of the neck. This violence was immediately succeeded by reiterated attacks of syncope, which were again followed up by symptoms of the most distressing, and distortions of an almost unparalleled, nature. In fact, from reading the description, and viewing the plate (I.) which is appended, by way of illustration, we should be almost inclined to say, that some "demon had tied the creature in a knot!" made of her trunk and extremities, both upper and lower. Without the engraving in question, and the most irrefragable testimony as to its being a faithful representation of what poor Sally *was* for two years and upwards, it would be too much to expect any one to be easily satisfied that the straight and handsome young woman who will, in all probability, shortly be seen behind a bazaar counter, ever could have been the original of such a mass of deformity. But, so it is.

The subject of this *metamorphosis* (for such she may be fairly called) had been long abandoned as a hopeless case, after having been seen by nearly fifty medical practitioners in the country. Her parents, being in straightened circumstances, resolved, at length, to remove her to London, with the expectation of attracting the notice of the benevolent public, and thereby obtaining some pecuniary assistance, but without any settled notion as to what use this might or could be put to. Dr. Harrison, having been accidentally informed of this, visited her, as an object of mere curiosity, in the first instance; but he no sooner saw her than he resolved to attempt something for the alleviation of her distress, and, step by step, proceeded to the grand desideratum of her perfect recovery, with uninterrupted success.

We have not room even to *abridge* the account of her situation when first visited by the author, much less to quote the report of the treatment, which was of the most simple nature, for it depended (as is most truly set

forth in the title page) "upon simple principles;" which principles may be resolved into a discovery, that the whole of the pre-existing derangement depended upon a partial dislocation, or *subluxation*, among the cervical vertebræ; the restoration of which, to their proper relative situation, was the whole and sole cause of the cure. How this was effected is candidly and clearly set forth in the pamphlet; while the narrative is interspersed with, and accompanied by, much ingenious physiological reasoning, as well as sound pathological and valuable practical information.

The girl, as we have hinted, will remain in London, and will be a most remarkable and interesting object of attention to intelligent persons in general, and to medical men in particular.

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*The Dublin Journal of Medical and Chemical Science. No. VI. Vol. II. January, 1833.*

THE present Number of our respected contemporary maintains its high scientific character, and contains a vast deal of matter deeply interesting to those engaged in the practice of medicine, as well as to those devoted to chemical research. The work is supported by an association of the most promising and rising of the profession in Dublin, as will be seen by reference to their original communications and reviews.

Among the contributions in the number before us, is an extremely valuable paper "on Strangulated Inguinal Hernia in an infant, cured by operation, to which are annexed cases of congenital hernia" of the brain, illustrated by plates. This paper is by Mr. Adams, and is so instructive that we shall extract a considerable part of it:—

"Although the surgeon is frequently consulted in cases of congenital inguinal hernia in young children, I believe the examples where this complaint has been found com-

plicated with a strangulation of the intestine, have been exceedingly rare.

"Young subjects are not, however, entirely exempt from this occurrence: 'Mr. Pott saw a child of one year old die of incarcerated rupture. Gooch has recorded an instance which proceeded to mortification in an infant of ten weeks, and one of six months perished from strangulation, in the hospital of Leyden\*.'

"The only instance of successful operation for the relief of strangulated hernia in the infant, which I find recorded, occurred in the practice of Mr. Long, in St. Bartholomew's Hospital. The age of his patient was only fourteen months, and it appears that the hernia was inguinal, not congenital†.

"The case which I shall now adduce, appears to me worth recording, not only as it differs from any of those above-mentioned, but as the result of the practice here adopted, establishes what, no doubt, might have been anticipated, that there is nothing either in the congenital nature of the hernia, nor in the circumstance of the patient being yet an infant, to contraindicate the propriety of having immediate recourse to the operation of dividing the stricture, when all other means have failed to afford relief. The relation of such cases is calculated to direct our attention to the important fact, that constipation of the bowels with vomiting may, even in the youngest children, occasionally have its source in a strangulation of the intestine.

"CASE.—William Furlong, ætat. one year and six months, a puny, emaciated child, still at the breast, was admitted into Jervis street Hospital on Sunday evening, March the 18th; the countenance was pale and sunken, the eyes languid, and surrounded with a dark circle; the child was restless, feverish, and thirsty, and every thing swallowed was instantaneously rejected from the stomach, while the bowels (which

\* Lawrence on Hernia.

† *Ibid.*



heretofore had been affected with an habitual diarrhœa) were now, and had been for the last two days, in an obstinate state of constipation. Upon exposing the abdomen, we observed that it was prominent, tense, and tympanitic, and the right inguinal ring appeared to be distended by the broad base of a pyramidal-shaped tumour, the apex of which was formed by the lowest part of the scrotum; this tumour had just the same tense feel that the abdomen itself had, and evidently contained intestine in a state of strangulation. The lowest point of the distended scrotum was intensely red from inflammation; this swelling, which constituted the hernia, was painfully sensible to the slightest touch, and the whole abdomen, both as to tension and sensibility, was nearly in a similar condition. We learned upon inquiry that the parents had observed the child to have been ill for the last forty-eight hours; that until this day they had never noticed the inguinal swelling; it appears, however, nearly certain, that the child's illness commenced with the sudden strangulation of the intestine, the occurrence of which was marked by vomiting, followed by the accession of fever, restlessness, sudden cessation of the habitual diarrhœa, and constipation.

*Treatment.*—This it was plain was a very urgent case, and it appeared that an immediate operation held out the only chance of safety to the little patient. At first, however, I made a trial of the taxis, but the sensation communicated to the hand on examining the abdomen and the tumour itself, and the state of irritability into which the child was thrown, whenever the taxis was attempted, soon made me desist, after the first effectual attempt, from having recourse to so painful an experiment, and one to which I resorted more in conformity to usage than with the expectation of success. I therefore summoned a consultation for eight o'clock in the evening, and in the mean time a tobacco enema was directed to be thrown

up, and the child was ordered a warm bath. On our visit at 8 P.M., however, we found our poor little patient in no respect relieved, but evidently weaker; it was therefore brought at once into the operation room. With the assistance of Mr. Ellis, one of the surgeons of the hospital, Dr. Hutton, and Mr. Power, I performed the operation in the following manner:—The child having been placed in a convenient position on the table, an incision, about two inches and a half in length, was made, which commenced at the base, or broadest part of the tumour, near the external abdominal ring, and extended to nearly the bottom of the scrotum. By this incision a considerable depth of soft, fatty, cellular membrane, of the usual granular appearance, was divided; on dissecting this layer off towards the side, a membrane of a reddish hue, covered with loose shreds of cellular structure, was exposed. This membrane seemed tense and much distended; but when, with difficulty, some of it was pinched up between the finger and thumb, the intestine was felt within it. A small opening was made into the lowest part of this distended tunica vaginalis; a director was introduced, and a considerable quantity of serum flowed out; a pair of scissors was then passed along the groove of the director, and the tunica vaginalis completely divided up the external abdominal ring. The following parts now presented themselves, and as there was scarcely any bleeding, they were all seen in their natural colours. At the very lowest part of the little cavity thus exposed, lay the testis, which was of a brilliant azure colour, overhung on its outer side by its epididymis; superior to these, but in immediate contact with the testis, was the strangulated portion of intestine; it was about the size of the largest cherry, with a polished surface, remarkably tense to the touch, and of a deep marone shade, a colour which was strikingly contrasted with the aspect of the epididymis and the brilliant azure hue of the testis. The stricture was re-

markably tight; an ordinary sized director could not pass it, without undue force; but a probe, substituted for it, passed up into the abdomen. This was next withdrawn, and, guided by the nail of the index finger of the left hand, a small blunt-pointed bistoury, as used by Sir A. Cooper, was cautiously insinuated, and a slight division of the stricture having been made upwards and inwards, the intestine was returned into the cavity of the abdomen; and lastly, the lips of the wound were united by three stitches. From the irritable state of the stomach, it was deemed imprudent to give any medicine by mouth; an anodyne liniment was therefore applied to the abdomen: the child slept soundly for three hours after the operation, and on awakening, discharged a quantity of flatus, which was soon followed by a copious evacuation of fæces. On Monday morning, at the hour of visiting the hospital, we found that the countenance of the child appeared lively, and that the blood had returned to the cheeks. It drank at the breast, and the stomach was no longer irritable; of course the fever, thirst, and restlessness subsided, and the abdomen became soft and natural.

"It is scarcely necessary to pursue details further than merely to mention that the sutures were removed on the fourth day, immediately after which the wound gaped somewhat, and the edges became a little inflamed; but on the fifth day there was a healthy discharge from it, and it soon healed from the bottom. The child is now restored to health, except that it has the hernia still; it has gotten a truss, and if the mother pays proper attention, I have little doubt that by its use, a radical cure of the hernia may be obtained."

In the paper on Encephalocele, Mr. Adams evinces great research, and an intimate acquaintance with foreign medical literature. He has amassed much valuable information, and added several cases which fell under his own observation. He is evidently a sur-

geon of high attainments and of sound judgment.

The next paper is by Robert John Kane, M.R.I.A., Professor of Chemistry to Apothecaries' Hall, entitled, "Miscellaneous Contributions to Chemical Science." The subjects treated of are—the Composition of the blood in Jaundice, Theory of Ethers, action of Iodides on Hydriodic and Sulphuric Ether, combination of Iodide and oxide of antimony, new mode of preparing Proto-iodide of Tin, priority of discovery of Iodide of Platinum.

It appears that Mr. Kane had, in June last, read a paper before the Royal Irish Academy (the Royal Society of Dublin) on the discovery just named, and published his description in the July Number of the work before us. M. Lassaigne of Paris read a paper on the same subject on the 17th of September, which was published in the *Journal de Chimie Medicale* in October. The former gentleman is therefore entitled to priority of claim as a discoverer. He has also succeeded in decomposing water by the magneto-electric current.

We shall notice the remaining papers in our next.

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#### AMPUTATION AT THE HIP-JOINT.

A CURIOUS mistake has been made in the French Dictionary of Practical Medicine and Surgery, now translating in this Journal, as will appear by referring to the article *Amputation*, No. 48, Dec. 29, ult. Dr. Veitch, of Chelsea, is called M. Weitch by our foreign contemporaries; and so accurate was our translator, that he copied the mistake. It is necessary to point out this error, as Dr. Veitch is entitled to much praise for his method of amputation at the hip joint, which is so much simplified, that any surgeon may perform this formidable operation with safety. We take this opportunity of alluding to another improvement in practical surgery made by this gentleman, so far back as 1804,

namely, the suggestion of the single ligature. He has described this and the former operation in a pamphlet, entitled "Observations on the Ligation of Arteries, Secondary Hæmorrhage, and Amputation at the Hip-joint." He observes:—

"While I was engaged during the years 1803, 1804, 1805, in conducting the important duties of one of the first hospitals in this country, I seriously felt the dangers arising to my patients from the existing practice of surgeons using large, flat ligatures; not only were they dangerous from their size and form, thereby exciting great irritation, but from their most unwise and improper distribution in the wound, inflicted by the knife of the operator. Still surgeons spoke of healing by the first intention; but no such thing took place, because their arrangements completely interrupted the powers of the animal economy in so closing the wounds they inflicted. The use of the large ligature was adopted, in order to guard against the division of the artery under the pressure of securing it.

"The risk of secondary hæmorrhage was supposed to be much increased by the application of the small ligature, and this opinion influenced me to a certain extent, and led me to make repeated experiments on the dead body in 1804, 1805, with the small ligature, previously to applying my reasoning to practice on the living body. That reasoning was founded on the advantages likely to result from diminishing irritation, and these reflections rendered me anxious to attempt, with safety, the reduction of the volume of foreign matter in the form of ligature, in securing the blood vessels, divided in the numerous and important operations I had to perform; and this improvement, which extends itself to all the operations in surgery, I carried to an extent that no one has usefully exceeded, not only by the diminution of foreign matter in securing the divided arteries, but by the distribution of these ligatures in the wounds inflicted by the operations of

surgery, and which distribution of these ligatures, combined with their form, brought this part of surgery as near perfection as it is capable of attaining. The sufferance of foreign matter in the wound, by cutting off the dependent ligatures, and allowing the knots only to remain on the arteries, and attempting to heal the wounds over them, has not been found to answer. The mode of arresting hæmorrhage, which I adopted, was carried into effect before the book of Dr. Jones was published, and without any knowledge of his experiments. I was not aware at the time I so successfully applied the single round ligatures to surgery, of the change that the artery undergoes by their action, and which knowledge led Dr. Jones very properly to recommend a round ligature; but I may here remark, that such recommendation was not sufficiently explicit, for it left the surgeon at liberty to introduce as much foreign matter in a round, as had previously been done in a flat form in securing arteries, and, by consequent irritation, defeating the good effects of the round form of ligature in aiding the process of nature in healing by the first intention. My experience and reasoning led me to recommend a small ligature, and its nature and form were not left to conjecture, but clearly laid down; and the introduction of this practice to surgery, by which its limits have been extended, is, I think, unquestionably due to me. Dr. Jones did not apply his round ligature to operations on the human body; and the practice of using the small single ligature, was not adopted at the Edinburgh infirmary, in which city his experiments were made, until the appearance of the following essay on the ligation of arteries, which was sent to the editor of the *Edinburgh Medical and Surgical Journal*, in 1805, and in sufficient time to have appeared in the last number of the said *Journal* of that year, but was not published until the first of April, 1806. It is far from my wish to detract from the

memory of Dr. Jones; no man is more sensible of his claims to the respect of his profession;—no man more alive to his ingenuity, his ability and patience in conducting his experiments than I am;—no man ever read his work with more satisfaction than I did, because his experiments tended to assist the cause of humanity, by aiding the removal of prejudices, which were arrayed against the single ligature, although its advantages have been most satisfactorily established by repeated and successful experiments conducted by me, in varied operations, on the living body—advantages which Dr. Jones did not possess when he published his book\*. The second essay was published in the same Journal, in the month of April of the year 1807, and had the effect of calling the attention of British surgeons to an operation actually discarded from among them by the authority of Mr. Pott; and at the time that essay was written, I am inclined to believe the authority noticed held some influence not only over the reasoning, but over the undaunted and enthusiastic feelings of Sir A. Cooper, in every thing that relates to surgery and its operations.

“When conversing with this able and distinguished surgeon, shortly after the appearance of the essay, on the operation of amputation at the hip-joint, Mr. Cooper, now Sir A. related some circumstances attending this important operation, as performed by Mr. Bromfield, who, it would appear, had, in the course of his attendance, mentioned the circumstance to one of his patients.

“At the future visits of Mr. Bromfield, the patient became inquisitive as to the results of the operation,

\* “Dr. Monro, the late illustrious professor of anatomy and surgery in the university of Edinburgh, gave his unequivocal testimony to the merits of this improvement in the application of the single small round ligature, by Dr. Veitch. Mr. Wardrop, who is inferior to no one as a surgeon, was among the first to see the advantages, and consequently to adopt the single ligature in his operations.

and naturally applied to Mr. Bromfield for information, who replied that the person he had operated on was dead, but that he had lived twenty-four hours after the operation\*. No operation should be declined, however difficult and dangerous, provided the concurrence of the patient can be obtained, and that it tends, by its effects, to alleviate pain, and increase the chances of recovery, otherwise become absolutely hopeless. The single dressing of a fractured and lacerated limb, will often give more real pain, than any operation for its removal will inflict.

“The mode of operating at the hip-joint, laid down in the following essay, will be found singularly applicable, where diseased bone renders this most important operation necessary.”

The method of operating has been described in our number already referred to.

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#### ABSCESS IN THE SUBSTANCE OF THE HEART.

REPORTED BY DR. CASIMIR BROUSSAIS.

A SOLDIER, aged 19, entered the hospital of Gros Caillon, with a variolous eruption upon him; he passed through the several stages apparently favourably. Towards the decline of the disease, diffused abscess formed on the left elbow; the discharge was scanty and of a greenish hue; the fore-arm and hand became prodigiously distended by infiltration, and cold to the touch. At the same time, sloughs formed on different parts of the body, and the patient's strength was quite exhausted;—he died on the 55th day from the attack.

On dissection, the heart was found to be larger than usual; but the left side alone was hypertrophied and dilated. At the base of the left ven-

\* “The operation of amputation at the hip-joint, has recently been performed with complete success by Sir Astley Cooper.

tricle, behind the mitral valve, and in the fleshy substance of the walls, there was an abscess of the size of a filbert, containing a whitish homogeneous pus; the cyst had no opening, either outwardly or inwardly. The rest of this ventricle was not diseased; but the ventricle towards its apex, and the auricle of the right side, presented two patches where the texture had degenerated into a purplish spongy substance, not unlike to ordinary eructile tissue. No disease was detected in any of the arteries or veins, nor in the other viscera.

*Reflections.*—The preceding case proves, beyond all cavil, that an abscess may form in the fleshy parietes of the heart, without occasioning any marked distress, or very evident sign, and that its formation must result from a local circumscribed inflammation.

The early morbid anatomists frequently mention suppurations, ulcerations, and gangrene of the heart; but we have reason to doubt their correctness; as no instance of mortification of the heart is, now-a-days, heard of. Senac is the first author who accurately describes the degenerations of the heart's texture. He says that the seat of the abscess is always in the cellular tissue connecting the muscular fibres, which are found generally to be little altered by the suppuration, and that the pus is poured out between their bundles. The base of the heart, he states, is most frequently affected. Neither Morgagni nor Lieutaud have reported any cases. Laennec describes one case, in which he found an abscess in the substance of the left ventricle, near its base, in the body of a child who had been affected with pericarditis. From the accounts left to us by Senac, Corvisart, and Laennec, it appears that there are no discriminating, or pathognomic symptoms of this degeneration. In some cases, the patients have died suddenly, at the time when they seemed to be in good health; in others, palpitations, and a feeling of strangling had been observed. Of one thing we

are assured, that an abscess of the heart may form, without any pain or suffering; a very satisfactory proof, that pain is not a necessary symptom of inflammation.

A very interesting and important feature in the present case, is the occurrence of certain changes, probably antecedent to suppuration, in the textures of the right ventricle and auricle. Dr. Broussais describes these as small circumscribed inflammations, with a sanguineous turgescence, induration, and incorporation of a black-coloured blood with the muscular substance, which appearance was compared by some to an interstitial apoplexy, and by others, to the structure of the corpora cavernosa penis.

*Erysipelas treated by Mercurial Inunction.*—Dr. Broussais has repeatedly employed this method, with very satisfactory results. The parts affected are to be gently rubbed with a mixture of equal parts of "onguent Napolitain" and of lard. The cases suited to this practice, are such as supervene to diseases by which the body has been much weakened, and in which the inflammatory action is feeble.

*Dr. Broussais' Opinion on the Use of large Doses of Tartar-Emetic in Pneumonia.*—The employment of this agent in acute inflammation of the lungs is most efficacious, when the patients have been weakened beforehand sufficiently by bleedings. We are more and more satisfied that it acts, not as a specific in counteracting inflammatory excitement, but altogether as a revulsive, or, in other words, that the relief to the lungs is always in proportion to the rapidity and to the quantity of discharges produced, whether by vomiting, purging, sweating, or flow of urine. It is quite a mistaken notion, to suppose that the amendment of a patient begins only when the antimonial ceases to have some sensible effect, or, as it is expressed, when a "tolerance" of the drug is induced. When it checks an

inflammation, without causing vomiting or purging, we shall find that profuse sweating, or diuresis, has generally taken place. But should no evacuation at all occur, the antimonial becomes an irritant to the stomach, and gastritis ensues. Dr. B has seen this repeatedly take place, and, therefore, dissuades its employment, whenever there are any symptoms of tenderness of the stomach, whether this be primary or consecutive. He narrates the following case. A soldier entered the "Hôpital du Val de Grace," having all the symptoms of an acute pneumonia of both lungs, with a hypertrophy of the heart. He was bled largely and repeatedly, but did not experience relief; indeed, the symptoms were aggravated, and the antimonial solution was ordered to be taken every hour. It produced copious purging, but the disease advanced rapidly to a fatal termination.

On dissection, the greater part of the lungs was perfectly normal, congestion being visible only in one part. On an examination of the stomach, its mucous coat was found intensely inflamed, and the inflammation was traced to have extended along the whole extent of the duodenum, as far as one-half of the tract of the ileum. The inner surface was much softened, and in patches converted into the appearance of a boiled pulp. In short, this patient, says Dr. Broussais, died, not from a pneumonia but from an intense gastro-enteritis.

*Obs. by Ed.*—The above report appears to us to be exceedingly imperfect and ill drawn up and does not do much credit to the enlightened physician, as no accurate diagnosis of the transference of the malady seems to have been made before death.—*Medico-Chirurgical Review*.

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#### CHOLERA, GREAT VARIETY IN THE TREATMENT OF, IN PARIS.

WE have regretted, that we have not noted down each and every mode and

method which has been recommended in this country; it would form a document at once curious and instructive, at least so far as in showing us, how the monster has laughed to scorn all the futile attempts to arrest its fury; and how frail and feeble are the grounds on which the practice of medicine, in the hands of many, is founded. No one, we think, will dispute with us, that the only rational hope of successfully treating this, or any other disease, is by a comprehensive and philosophical scrutiny of its physiology or symptoms, during life, and of its pathology, or its appearances after death. We must not look to one, or to another of these singly, but group them together, and cautiously endeavour to trace every link of the chain; it is only thus that we can expect to arrive at any rational conjectures, as to the causes and essence of the disease; and, till then, the treatment must necessarily be empirical, and on the whole, perhaps, as inefficacious, nay, even decidedly hurtful, as beneficial. If, in any future period, a method of cure, at once successful and generally applicable, be discovered, we, or our successors, must look back to the records of this disease, with feelings of little respect for the soundness and sagacity of the present race of medical men; for we have all along permitted ourselves to be too much carried along by an exclusive, or undue attention to one particular phenomenon, and on that, as on a pivot, we have made our practice turn; but it is never too late to be wise, and our wisdom will be best displayed, by endeavouring to draw some useful lessons from the blundering errors we have hitherto committed. Some idea may be formed of the general malapragis of the French physicians, from the following report of the different plans of treatment of the cholera in the various Parisian hospitals.—*Op. cit.*

*Hôp. Necker.*—*M. Bricheveau.*—Vapour-baths, aromatic infusions—general and local bleedings, sinapisms and stimulating embrocations—wine,

æther, and cordials—emetics, cold lemonade, iced water, effervescing draughts, ice laid on the epigastrium, opiate enemata, opium pills by the mouth. In less severe cases, energetic antiphlogistic treatment.

*Hôp. Orphelins.*—*M. Blanc.*—Bleeding, emetics, effervescing draughts, purgatives, and then astringents, if the purging is obstinate—iced drinks.

*Hôp. Piepus.*—*M. Patrix.*—Fumigation with chlorine—bleeding—emetics—narcotic decoction—iced lemonade—blisters on each hypochondrium.

*Hôp. St. Antoine.*—*M. Mailly.*—Leeches to the anus and epigastrium—venesection, antispasmodic and opiate drinks—stimulating frictions—infusion of peppermint, with acet. ammoniæ.

*Hôp. St. Louis.*—*M. Bielt.*—Subnitras hydrargyri—charcoal, in doses of ʒss. every hour.

*M. Lugol.*—External warmth—æther, with laudanum and acet. ammoniæ—pills of acet. morphiæ. For drink, strong tea, well sugared, acidulated, and alcoholised! against the vomitings, seltzer water, either alone or with wine.

*M. Gerdy.*—General stimulating frictions—blisters along the spine—sinapisms to the arms, legs, and epigastrium—gaseous, laudanised potion—pills of camphor.

*M. Jobert.*—Sinapisms along the whole extent of all the limbs—laudanum—leeches to the anus. When vomiting is obstinate, seltzer water, or the withdrawal of all drinks.

*Hôp. Salpêtrière.*—*M. Piorry.*—General or local bleeding—hot aromatic infusion—Malaga wine, or light punch, during the collapse—iced water, and, when re-action ensues, leeches, poultices, and gum drinks.

*Hôp. Pitié.*—Fresh lemonade, or warm tea—peppermint and laudanum,

opiate enemata. *M. Andral* employs ipecacuan emetics—excitants during the cold stage—local and general bleedings during re-action—opium in small doses.

*M. Lisfranc.*—Tea, lemonade, and punch—enemata, with sulphate of quinine—sinapisms and stimulating frictions.

*M. Velpeau.*—Sinapisms, opiates, quinine enemata, to which are added laudanum and camphor.

*M. Bouillaud.*—Bleeding, leeches to abdomen, frequently repeated—iced lemonade. In the state of complete collapse, weak coffee as a drink, and drawing a heated iron along a flannel band, which has been well soaked in equal parts of liquor ammoniæ and spir. tereb. and applied over the whole length of the spine.

*Val de Grace.*—*M. Broussais.*—When there is profuse vomiting and purging, the patient should be given ice alone to swallow: when the state of cyanosis ceases, we ought to substitute drinks. No frictions should be employed. General bleeding, or, what is better, numerous leeches, and afterwards hot poultices to the leech-bites—sinapisms, vapour-baths—leeches and iced water to the head.—*Journal Complément.*

#### A NEW SPECIES OF OPIUM.

“ BESIDES those kinds of opium, already noticed, namely, the Turkey, the East Indian, the Egyptian, and the European, there is, gentlemen, another kind, which may be, with propriety, peculiarly characterized as the *Persian*. It has been imported into this country only very lately, and the specimen I now present to you is one of those contained in the first parcel imported. It comes from Trebizond, in Persia, and I obtained it from Messrs. Yeatman and Lum, Fore-street, City. You perceive, gentlemen, that it is in small cylindrical pieces, rolled in polished

paper. On tearing off a portion of the wrapper, you perceive that its colour is *reddish-brown*, and, in this character, it approaches to the best opium, though much lighter in colour than the Turkey. It has a very fœtid, heavy smell, and a bitter, acrid taste. I have not had time to ascertain the quantity of morphine and narcotine it contains, but shall let you know the first opportunity. I am inclined, from its sensible qualities, to imagine that it will be found to be very valuable and active; and, it is to be remembered, that a great part of the 'Turkey Opium,' as it is called, comes from Persia."—*Extract from Dr. Epps's Lecture, Jan. 3, 1833.*

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#### EFFICACY OF SUGAR IN POISONING BY COPPER.

M. PASTEL has recently made several experiments on dogs, in order to ascertain the value of sugar as an antidote for poisoning by copper. He concludes that repeated experience has left no doubt of the truth of his inference.—*Journal de Pharmacie.*

The results of my experiments were,—

1st. That sugar decomposes verdigris not only at boiling heat, as has been said, but also at the usual temperature; that this decomposition is more or less rapid, in proportion to the concentration of the liquids, and that in either cases, the salts are reduced to the state of protoxides;

2ndly. That it exercises an analogous action in the stomach, as animals to which it has been administered survived much longer than in the contrary cases; and that the alterations observed after death were very different from those usually found after poisoning caused by preparations of copper;

3rdly. That the alterations observed after the action of sugar and albumen are nearly the same;

4thly. That consequently it should

be ranged amongst the antidotes for verdigris, as sugar decomposes, not only at the usual temperature of the stomach, but even at the common temperature; and, besides, it has been successful in a number of cases.

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#### RECENT DISCOVERY IN FRANCE OF THE LAMINATED STRUCTURE OF THE BRAIN.

At one of the last *Seances* of the Academy of Sciences in Paris, and at which M. Leuret's observations on the laminated structure of the brain came under discussion, M. Serres took occasion to remark, that he himself had previously made the discovery. This seems to have given rise to a proposition that the anatomical preparations and drawings in the possession of these gentlemen, and illustrative of the point in question, should be submitted to the inspection of MM. Geoffroy-Saint-Hillaire, Esquirol, Bourdois de Lamotte, Villerme, Edwards, Andral, Louis, Millevê, and a few others. According to a statement furnished by M. Leuret, in a letter addressed to the President of the Academy of Sciences, his preparations exhibited, most distinctly, the extent and direction of the laminae, which M. Serres failed to accomplish. An Italian author (Genneri) is the only person, according to M. Leuret, who has thrown out an idea as to the division of the convolutions of the brain into an infinity of laminae. This subject cannot fail to excite the highest interest among phrenologists. We shall give, in our next Number, the details contained in M. Leuret's letter.

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#### NECROLOGY.

##### DEATH OF DR. JAMES CRAWFORD GREGORY.

It is with sincere regret that we record the decease of Dr. James Crawford Gregory, which took place at Edinburgh, on the 28th ult. He was our contemporary, and son of the illustrious author of the "*Conspectus Medicinæ Theoreticæ.*" Descended from a long line of distinguished professors, his father, grand-



father, and great-grandfather, having filled the Chairs of Mathematics, Institutions, and Practice of Medicine in the Scottish Universities.

He inherited the abilities and talents, if we may use the phrase, of his justly celebrated ancestors. He was a most assiduous and zealous student; and on him devolved the responsibility of supporting and perpetuating the renowned name of Gregory. After obtaining the doctor's degree in the University of Edinburgh, he repaired to France, and there we can attest he was most indefatigable in pursuit of science. We happened to be in Paris at the time, and felt sincere pleasure in observing his unceasing industry, as we, in common with all the disciples of his father, indulged in the gratifying anticipation, that he would one day maintain the name of his revered ancestors. At this period, the late Dr. William Cullen, nephew to the Scottish Hippocrates, was in Paris, and he, too, evinced the most satisfactory proofs that he was determined to follow in the wake of his renowned relation. These gentlemen published, in 1829, an edition of Dr. Cullen's First Lines of the Practice of Physic, and rendered the work accordant with the views of that period.

The scion of Cullen was cut off in the prime of life, and the representative of the illustrious philosophers of the Gregory family has shared a similar fate. Both would have added lustre to our Alma Mater had they been spared.

Dr. Gregory was one of the finest figures we ever saw. His features were regular, indeed truly handsome, and displayed an intelligence and a benevolence rarely observable. He was indefatigable as physician to the Royal Infirmary; he was the favourite pupil of the great Laennec; and he contributed, to the *Edinburgh Medical and Surgical Journal*, some valuable papers on diseases of the chest and on diseases of the kidneys. His complaint was malignant typhus, with which he was said to be infected in performance of his duties at the Infirmary. So great was the malignity of the disease, that, though he was in the prime of life (his age being 32) and had the assistance of Dr. Abercrombie and his cousin, Professor Alison, he sunk on the twelfth day of his illness.

Thus has Scotland to mourn, during 1832, among her illustrious dead, other victims of the king of terrors—Walter Scott, Leslie, Cullen, and Gregory have been gathered to their forefathers.

We are grieved to state, that Drs. Abercrombie and Alison, two of the ablest physicians of Edinburgh, are, according to the newspaper reports of the capital of Scotland, despaired of, (Monday, January 7th). It is said, that there is a most malignant typhus now prevailing in Edinburgh.

#### NOTICES TO CORRESPONDENTS.

A. C.—It was impossible for us to notice one-tenth of the essays and treatises on cholera.

We analysed those we considered the best, though there were some of sterling merit which we were compelled to pass over. The fact was, that all in unison with the Central Board of Health were undeserving of notice, as they inculcated the recanted doctrines of that sapient body, whose renown is imperishable.

O.S.—Many thanks for the Regulations of the Dublin Apothecaries' Hall. We have written to ascertain whether these are now in force: we think it impossible. The professor of chemistry to that body is far too enlightened to sanction laws, which must have been passed before his appointment. We are satisfied, that Mr. Kane, the able editor of our Dublin contemporary, the gentleman to whom we allude, would be as anxious as ourselves to maintain the axiom, *Patens omnibus Scientia*.

Since the above was written, we have received a letter from Mr. Madden, Secretary to the Council of the Apothecaries' Hall, Dublin, in which he states, that all Lectures recognised by the Medical Corporations in London will be received by the Institution to which he belongs. We are much obliged by the view of our defence of the Profession while exposing unprincipled quacks and their nefarious knavery.

Dr. F.—We made the extract for the purpose of paying a just but trivial compliment to two gentlemen of high attainments and of integrity. We shall not omit to notice the communications forwarded this week, when opportunity offers.

Mr. D.—We cannot acknowledge works unless on some of the medical sciences.

B.—We have seen the able article in *Merle's Weekly Register*, on the necessity of reform and suppression of quackery. His strictures on Long, and the ignorant wretches who pretend to superior medical knowledge, are excellent. We shall never cease until we banish the demon of empiricism from this country. The end of quackery and humbug is fast approaching. The new Parliament will annihilate them.

*Justus* will do well to reflect on this day's leader.

Damages and Costs against Dr. Ryan for defending the honour and dignity of the Medical Profession nearly £800.

Amount of Subscriptions already received,  
in aid of Dr. Ryan . . . £175 2 0  
William Madden, Esq., Secretary to  
Apothecaries' Hall, Dublin . . . 1 0 0

Erratum.—Page 720, for *fa fue*, read *for fun*.

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# London Medical and Surgical Journal.

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## LECTURES

ON THE

## PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

Delivered at the University of London,

SESSION 1832—1833,

BY

PROFESSOR SAMUEL COOPER.

LECTURE XVIII., DELIVERED NOV. 12, 1832.

GENTLEMEN,

In the last lecture, I gave you an account of two kinds of ulcer, the *healthy*, or *simple*, and the *irritable*, and of their treatment. The varieties of sores are exceedingly numerous: surgical lectures and books describe only those which are most strongly marked, and which exhibit certain characters, sufficiently delineated to admit of clear description; but, between numberless other sores, the shades of difference are very slight indeed; and, in this point of view, I think, ulcers afford an excellent illustration of the infinite diversity in the forms of disease in general, some of which are so peculiar as to be immediately recognized, while others are much less dissimilar, and, as it were, run, or are gradually shaded off, one into another. No lecture, no treatise on this subject, will convey to you an adequate idea of the immense number of various sores met with in practice: the descriptions can only embrace those differences and characters which are either portrayed by nature, or revealed by experience, in the boldest and most distinct manner.

One ulcer, which I have not yet noticed, is termed the *indolent*, which you will more frequently meet with in practice than any other kind of sore. I may say, gentlemen, that three-fourths of the ulcers, for which you are likely to be professionally consulted, will be of

this nature. In the London Hospitals, the number of indolent ulcers is calculated even to exceed that proportion to the rest. They are mostly situated upon the lower extremities, and occur chiefly in persons above the middle age, and some of the patients are far advanced in years. Such ulcers are not often observed in the young, unless the constitution and health be particularly bad. In this species of sore, the edges of the skin, around the ulcer, are generally thick, rounded, and prominent; the granulations are pale, large, flabby, and smooth, with a peculiar glossy appearance, or kind of semi-transparency about them, which you will never forget after you have once taken notice of it. They secrete an imperfect thin matter, containing flocculent substances, which adhere to their surface. The paleness of the granulations denotes a want of vigour and briskness in the circulation in them; indeed, such is the indolent nature of these sores, that sometimes no granulations are produced at all, and the bottom of them looks as if it had been scooped out, without any attempt at a restorative process having been afterwards made: when the bottom of the ulcer is thus destitute of granulations, it is generally of a pale brown colour. When an indolent sore is in this condition, with the edges at the same time high, rounded, thick, and prominent, it is frequently termed the *callous ulcer*. For a considerable distance around the part, the integuments are indurated and much thickened, and sometimes the whole limb looks as if it were œdematous; but, if you examine it with your fingers, it will not *pit*, and the swelling is found to be quite firm and incompressible. In nine cases out of ten, the indolent sore presents itself on the leg, and generally near the ankle, where it is more difficult to cure. In the majority of cases, the pain is so trifling, that the patient is scarcely conscious of having a sore at all; he walks about, and follows his ordinary occupation, as if nothing were the matter with him; and it is only when the ulcer becomes accidentally inflamed, that he is inclined to keep his limb quiet, or to confine himself in bed. The mode of dressing a common ulcer will

sometimes communicate this indolent character to it: thus, if emollient poultices be continued too long, the granulations will lose their healthy character, and become flabby, large, pale coloured, and semi-transparent, and the healing process will not advance. In such a case, either cicatrization will not go on at all, or if it should do so, the cicatrix would be too weak to be serviceable, it would not bear the common exercise of the limb. On the other hand, if you take care to stimulate these weak granulations, by means of proper dressings, they undergo considerable improvement in their nature, becoming smaller, more compact, redder, and free from the glossy appearance, which I have mentioned as characterizing the granulations of a truly indolent ulcer. The cicatrix, which then follows, is firm and lasting.

Now, gentlemen, with regard to applications to indolent sores, the following, I believe, are most commonly employed: First, the solution of the nitrate of silver, from five to ten grains to the ounce of distilled water; solutions of the sulphates of copper and zinc; the nitrate of silver in substance; the diluted nitrous acid; the ointment of the nitrate of quicksilver, diluted, or weakened with lard or spermaceti ointment; the unguentum resinæ flavæ, or yellow basilicon, to each ounce of which is added one drachm of red precipitate. Mr. Alcock gives a particularly favourable report of the plan of dressing chronic ulcers of long standing with the solution of the chloruret, or chloride of sodium, sometimes mixed up with a poultice, but more commonly applied by means of lint. When the surface of a chronic ulcer is foul, and the discharge thin and offensive, I find that the solution of the chloride of sodium has an excellent effect, cleaning the surface of the sore, and stimulating it so as to bring on a desirable change in the nature of the granulations. The strength, in which the last application is used, varies according to the effects produced, in particular examples; but generally it is employed in the proportion of from three to six parts of distilled water to one of the chloruret of sodium, or *Labarraque's liquor*. When lotions of any kind are applied, of course the lint would soon become dry, if not covered with a common pledget, or a piece of oilskin; either of these will serve to prevent evaporation. But, gentlemen, I believe, that nothing is more useful in the treatment of indolent ulcers than well regulated pressure, made with a common roller, applied so that the pressure may be equable, from the foot to the knee, or else you may make the requisite pressure with straps of sticking-plaster, according to the method proposed by the late Mr. Baynton. When you intend to adopt the latter practice, you must cut the sticking-plaster into straps, about two inches in breadth and fifteen in length, or, at all events, long enough to encircle the limb with two inches over at each extremity. The first strap is to be applied with its central portion on the side of

the limb furthest from the sore, towards which the two ends are to be conveyed, so as to cover it, and overlap one another for some little distance beyond the ulcer in each direction, then the next piece must be applied, so as to cover about two-thirds of the first, and thus you go on till you have covered, not only the ulcer, but about two inches of the limb, both above and below it. Mr. Baynton then used to put on the limb a soft linen compress, and over this a calico bandage. One advantage of this treatment is, that the patient generally experiences less detriment from exercise, than in any other manner of treating the sore.

With regard to frequency of dressing; if you make use of this method, it is seldom necessary to dress the ulcer oftener than every other day, unless the discharge be profuse. If there be tendency to inflammation, or the weather hot, much comfort will be derived from wetting the whole of the dressings with cold spring water. By means of pressure, skilfully made in the manner I have described to you, the firm swelling, resembling œdema in appearance but not like it in feel, quickly subsides; the callous edges of the ulcer are reduced; the granulations become healthy, and lose their flabby glossy appearance, they diminish in size, assume a florid colour, and secrete thick pus of the best quality.

Sometimes, gentlemen, the common adhesive plaster proves too irritating to the skin; you may then apply either the emplastrum plumbi or the ordinary adhesive plaster and the brown soap plaster blended together in equal parts. I believe that this composition is much used by Sir Astley Cooper; I have tried it, and found it answer exceedingly well. You should be careful not to extend the treatment with pressure to irritable sores.

Various other plans are resorted to by practitioners: thus, Mr. Higginbottom, of Northampton, has a method of his own, which consists in applying nitrate of silver, not only to the sore, but also to the surrounding skin. He begins with keeping the patient twenty-four hours in bed; he then uses the caustic in the way I have mentioned; and immediately afterwards applies straps of adhesive plaster. You may conceive, gentlemen, from what has now been stated, that these indolent sores will bear a great deal; this must be the case, if they will bear, at once, caustic and adhesive plaster, not only without harm, but with benefit. Mr. Scott, of the London Hospital; has an ingenious way of applying the straps of plaster to an ulcerated leg; he begins with laying the end of the first strap along the inner side of the great toe, and passes the strap along the inner side of the foot, and then over the heel to the outer edge of the foot, as far as the little toe. This first strap is, of course, horizontal. The next strap is applied with its centre to the sole of the foot, near the heel, and each end is made to pass perpendicularly up the sides of the leg. The third is applied horizontally in the same direction as the first,

and rather higher up, yet meeting and overlapping it a little. The fourth is applied perpendicularly; and the plan is continued so as to cover as much of the limb as is judged to be desirable. The foot is bent to a right angle during the time of putting on the plasters. This mode of dressing has a neat appearance; and one very good effect of it is, to keep the ankle motionless; on which account, the method is frequently advantageous in other cases, as, for instance, after dislocations or fractures, when it may be adopted just after the splints are removed, and when you may yet wish to afford some steadiness to the ankle, without continuing splints any longer.

I have said, gentlemen, that you may conceive how much these indolent ulcers will bear, when they endure, with impunity, the application of caustic and adhesive plaster at the same time; but you will have a still better notion on this point, when I tell you, that, in Edinburgh, Mr. Syme sometimes applies blisters to them—blisters covering a considerable portion of the surrounding skin, as well as the sore itself. This plan was suggested to him by a fact, which his experience revealed to him, namely, that some of these sores would not heal under any ordinary methods of practice; but that, if the part happened to be attacked with erysipelas, a new action was set up, which, after the subsidence of the erysipelas, terminated in the cure of the ulcers. Mr. Syme, therefore, thought that he might substitute the irritation of a blister for the altered or increased action induced by the erysipelas. I have never seen this practice tried in London: indeed, it is only within the last year or two, that it has been adopted in Edinburgh; and I mention it merely to convince you, that you may sometimes deal freely and boldly with these ulcers, not only without danger, but with benefit to the patient.

Gentlemen, the next kind of ulcer, meriting your careful consideration, is the *phagedænic*. The expression literally means that the sore is one that *eats away* the parts; and really its appearance is such as conveys an idea of this having been the process by which the chasm has been produced. The surface of a phagedænic sore is yellow and irregular; the matter is generally very adherent to its surface, secreted only in small quantity, and not unfrequently tinged with blood. Perhaps we more frequently meet with phagedænic ulcers in syphilitic cases than any others; but they occur, also, under other circumstances. Thus, the *cancreum oris*, as it is termed, a foul ulcer, which attacks the mucous membrane of the lips and cheeks, is a true specimen of phagedænic ulceration. I may also remark, that though scrofula generally produces sores of an indolent kind, it sometimes gives rise to phagedænic ulceration of a very troublesome and inveterate description. But, gentlemen, when phagedæna does occur in syphilis or scrofula, I believe it to be an accidental complication, not influenced, in the slightest degree, by the

specific nature of those constitutional diseases. Hence, when phagedæna arises in syphilis, mercury, instead of being a remedy, generally becomes a poison. Phagedæna from syphilis, or, more correctly, that species of phagedæna which is met with in the foul wards of hospitals, and in constitutions impaired by an abominable atmosphere, unmerciful courses of mercury, and mode of life, bears considerable resemblance to hospital gangrene. This fact I noticed the other evening, when the subject of hospital gangrene was before us; indeed, there is such an approximation of the two diseases to each other in all their most important features, that the opinion of their being identically the same affection is sometimes entertained. Whether hospital gangrene, from the pestilential atmosphere of a military hospital, crowded with wounds and ulcers, is actually the same disease with the phagedæna observed in the foul wards of the metropolitan hospitals, is, however, a matter for further inquiry.

*Gangrenous phagedæna*, as it is sometimes called, begins at some minute point of ulceration or abrasion, or as a small boil surrounded with a halo of dusky red inflammation. It is often met with in the very lowest class of filthy gin-drinking prostitutes. One variety of the disease, which may be more conveniently noticed, when I come to the subject of syphilis, is well known at Guy's and St. Thomas's Hospitals, under the name of the *Swan-alley sore*, because many cases of it come from that place. If any gentleman wishes to know particularly where Swan-alley is, I can only say that it is somewhere near St. Catherine's docks (*alaugh*), where girls of tender age have intercourse day and night with the Lascars and other men of colour, from the shipping in that neighbourhood. These girls give their earnings to a set of Jewish bawds, who, in return, give them abundance of gin, though little food. The common seat of the disease in them is about the nates, the groin, and the bend of the thigh. I have seen some cases where the arm was affected; and, in one case which was in St. Bartholomew's Hospital, when I was a student there, the brachial artery was exposed nearly through its whole length; but the disease is most frequently remarked in the groin: and, when in this situation, it sometimes commits such ravages, that the femoral artery is denuded. It is attended with severe darting pain, at first remitting, but afterwards incessant. The exposed surface is straw-coloured, and covered with a viscid secretion. Here, gentlemen, you will observe a resemblance to hospital gangrene, the matter of which I described as being of a glutinous, pulpy consistency. The edges of the ulcer are thick and abrupt, frequently everted, and surrounded by swollen red integuments.

Another common occurrence is hæmorrhage. Here you will perceive another feature of resemblance to hospital gangrene. The bleeding sometimes takes place to such an extent, that

it contributes materially to accelerate the patient's death. The fetidness of the discharge, arising from gangrenous phagedæna, is such, that when once you have smelt it, you can never forget it again; it is so different from every other perfume, that an experienced surgeon knows the ulcer by it almost before he sees it. I do not remember whether this peculiarity of the stench of the hospital gangrene which occurs in military hospitals is recorded in the emphatic manner which that of syphilitic phagedæna is, though I am aware that the smell there is bad enough; but, in phagedæna, it is not bad, but *peculiar*,—as peculiar as that which characterizes ulcerated carcinoma. When the sore is deep, a great quantity of matter is secreted, containing shreds of the disorganized texture, of a pulpy consistence, which are removed with the dressings. Although the disease proceeds with terrific rapidity, at first there is but little constitutional disturbance, but in the advanced stages, the general indisposition becomes alarming, the patient is sleepless from the agony he suffers; his appetite is lost; his tongue is covered with a white or brown fur; there is pain in the epigastrium; a feeble accelerated pulse; severe head-ache; and sallowness of the countenance. When the disease spreads with great rapidity, it may be accompanied with bilious vomiting and diarrhœa, but there is no delirium to the last. Here also we may observe certain points of resemblance to hospital gangrene, and is like this disease, inasmuch as it often attacks several persons in the same ward, or hospital, especially if they happen to lie near one another. The opinion that gangrenous phagedæna and hospital gangrene are identical receives corroboration from another circumstance, namely, that local treatment is perhaps more efficacious in both these disorders, than constitutional treatment. In the commencement of gangrenous phagedæna, if the patient be not too much reduced, bleeding will sometimes relieve the agony; but, as copious hæmorrhages are liable to occur from the sore, you should be careful not to take away blood from the arm with too much freedom, unless, indeed, you were to bleed the patient on the principle of endeavouring to lessen the disposition to hæmorrhage in the sore, a plan, which, I believe, does not promise much success in any phagedænic diseases. Local bleeding, with leeches, is not commonly recommended, because the bites would be likely to assume the same morbid action. The most approved plan of treatment when debility prevails, is to exhibit the sulphate of quinine and the diluted sulphuric acid, allowing at the same time a moderate quantity of port wine, and paying due attention to the bowels; but, of all the medicines, given in this disease, I believe opium to be by far the most valuable one, and it may be joined with tonics, and, if the bowels be quiet, with diluted sulphuric, the nitrous or citric acid. Mr. Welbank, who wrote an excellent account of this disease, as it presented itself a

few years ago in St. Bartholomew's Hospital, which account is published in the *Medical-Chirurgical Transactions*, found the best mode of treating gangrenous phagedæna was to dip pieces of lint in the undiluted nitric acid, and, having protected the surrounding parts by covering them with a thick coating of cerate, to press the lint upon the surface of the diseased part, until it had been converted into a firm dry mass: the ulcer was then covered with simple dressings, and over these was put linen wet with an evaporating lotion. After the sloughs had been thrown off, if any appearance of phagedæna recommenced, the application of the strong nitric acid was repeated.

In France, all phagedænic ulcers are now usually treated with the solution of the chloruret, or chloride of sodium; this is the favorite application, as I mentioned in my observations on hospital gangrene, and no doubt it is entitled to a certain share of praise; but I believe that it has no specific power of stopping the progress of common phagedænic sores, as is sometimes represented. For this reason, I am inclined to doubt whether hospital gangrene is the same disease as the ordinary form of gangrenous phagedæna; I doubt, because it is declared by several surgeons of high reputation in France, that they can certainly stop hospital gangrene by means of the chloride of sodium; whereas, in London, we know that such medicine frequently fails in checking phagedæna.

Another kind of ulcer is erroneously called *varicous*, as if the ulcer itself were in this condition: the term only signifies, that the ulcer is complicated with a varicous state of the veins, and with a difficulty of cure depending upon this disorder of the veins of the limb. *Varicous ulcers* are, like some others, peculiar to the lower extremities, and mostly attack the inside of the leg, near the ankle, or else form upon the instep. As I observed to you the other evening, a varicous state of the principal superficial veins always creates a disposition to chronic inflammation of the integuments of the leg; it seems as if some derangement in the capillary circulation of the part were occasioned, producing this disposition to chronic inflammation, which is denoted by brown dusky discolorations of the skin, and too frequently proceeds to ulceration. The edges of a sore thus formed are indurated, raised, and callous, while its colour, and that of the neighbouring skin, are brownish, or livid. The pain is considerable, and instead of being confined to the sore, extends nearly throughout the limb—from one end of it to the other: indeed the pain is sometimes more severe in other parts than in the sore itself.

Now, gentlemen, with respect to the treatment of ulcers attended with varicous veins:—when the patient first applies, the sore is generally irritable, and therefore you cannot have recourse to stimulation or pressure; you must generally begin with a soothing antiphlogistic plan, prescribing leeches, evaporating lotions,

aperient medicines, and low diet, and directing the limb to be kept perfectly quiet in the recumbent position. If cold applications should fail in bringing relief, you would then order poultices and fomentations to be tried; but when you are first consulted, you will generally find that the patient has been walking about, that the part is more or less inflamed, and, consequently, that soothing applications will be indicated. Afterwards, the principal indication will be to make pressure on the diseased veins by means of a roller, laced stocking, or stocking elastic bandage, or to cut off, in some way or another, their communication with the branches coming from the sore. It was on this latter principle, that Sir Everard Home proposed to tie the vena saphena major, where it ascends over the back of the knee-joint, a scheme now abandoned, because it was found that many persons, so treated, died from inflammation taking place extensively within the tied veins,—in short, from what is termed *phlebitis*, in which the inflammation of the lining of the veins will sometimes proceed even up to the right auricle of the heart itself. We know, gentlemen, that the great veins will not bear to be tied with such impunity as the arteries; if you put a ligature skilfully on an artery, there will generally be no bad consequences; but if you tie or irritate a vein, extensive inflammation of the vessel, and of others into which it empties itself, will too frequently ensue, attended with derangement of the system, very similar to what is noticed in the worst stages of typhus fever. On these grounds, Sir Everard Home's operation has now been abandoned. Another method of cutting off the communication of varicous veins with those of the sore was suggested some years ago, by Mr. Brodie, who passed under the vein a narrow bistoury, with the flat side of it turned towards the vessel, until it had passed quite underneath it; then the edge was turned upwards, and the vein divided, care being taken not to cut through the skin. This practice, I believe, is preferable to that recommended by Sir Everard Home; however, it is not frequently adopted, so great is the apprehension of *phlebitis* in the minds of all experienced surgeons. The application of the actual cautery to varicous veins is a method of great antiquity, and occasionally advocated in modern times. It is frequently productive of severe consequences, not perhaps so often of *phlebitis* as the tying the veins is, but of extensive inflammation of the soft parts, and ill-conditioned ulcers, even more difficult to heal than the original one. Now, gentlemen, as there is no chance of this method ever being extensively revived in this country, I shall not detain you longer with objections to it.

Most cases of varicous veins may be successfully treated by the judicious application of bandages, especially of the stocking roller, which is elastic like a common stocking, and when well applied, makes permanent and equable

pressure. Well then, gentlemen, the common method of treating these ulcers is, the anti-phlogistic plan while they are inflamed or irritable, by means of leeches, evaporating lotions, purging medicines, low diet, and confinement to bed; and as soon as the sore has become quiet, methodical pressure is to be employed. For this purpose, you may use a common roller, or stocking bandage, or the laced stocking. When, by these measures, the sore has been brought into a better state, the dressing should be adapted to the particular condition in which the ulcer and surrounding skin may happen to be.

With regard to *specific ulcers*, those produced by scrofula, the venereal disease, fungus hæmatodes, chimney-sweeper's cancer, and common carcinoma, will be considered in future lectures. Sir Everard Home has described, as a specific ulcer, one that sometimes occurs on the instep, attended with enormous thickening of the integuments, almost like what is seen in elephantiasis. The disease is met with in persons who have lived freely. The best application is the ointment of nitrate of quicksilver, with a proportion of camphor in it. What has been called the *fungated ulcer* of the calf of the leg, or sole of the foot, may be cured by the external and internal use of the liquor arsenicalis, unless accompanied by disease of the lymphatic glands, when it is always incurable.

There are numerous specific ulcers, besides those which I have mentioned: many of them are exemplified in the effects of the ulceration resulting from various cutaneous diseases. The principal characters of the scorbutic ulcer, or that produced by scurvy, will probably be described by the Professor of Physic.

#### LECTURE XIX.—DELIVERED NOV. 19, 1832.

GENTLEMEN,

HITHERTO the observations delivered in these lectures have related chiefly to *common inflammation*, and its occasional consequences, namely, *suppuration*, *abscesses*, *mortification*, *ulceration*, and *ulcers*; but, certain other kinds of inflammation, some of which are also attended with these events, still remain to be considered, as, for instance, *erysipelas*, *diffuse inflammation of the cellular tissue*, and the varieties of inflammation exemplified in *boils*, *carbuncles*, and *malignant pustules*, all which affections are very different from common inflammation, and each of them has characters peculiarly its own. Erysipelas is generally defined to be a peculiar inflammation of the skin, characterised by a remarkable propensity to spread rapidly, and to a considerable extent, sometimes attended with vesicles, sometimes without them; but it is necessary that you should understand, that one form of erysipelas affects the cellular membrane as much as the skin, and sometimes even in a greater degree.

Then, gentlemen, one variety of erysipelas is in reality a fever, for it begins with con-

stitutional disturbance, which leads to this peculiar inflammation of more or less of the surface of the body, with as much certainty, and in the same undeviating manner, as some other kinds of fever (the exanthemata) lead to the production of other cutaneous inflammations. Mr. John Hunter believed, as I think with good foundation, that erysipelas, viewed as an inflammation having a remarkable disposition to spread rapidly along the skin, denotes the existence of a peculiar state of the constitution, without which erysipelas would not have taken place from any ordinary exciting cause, but only common phlegmonous inflammation. That the system is in a condition different from that of health, when erysipelas occurs in consequence of fever, is perfectly manifest. I should say then, that erysipelas can only take place under circumstances which have some determinate, but unknown, unfavourable influence on the system. The authority of John Hunter might be quoted in support of another doctrine, yet partially entertained, that erysipelas is not exclusively confined to, or always originally seated in, the cutaneous texture, or even in that and the subjacent cellular membrane together; but that inflammation of any part, when the constitution is in the peculiar state to which I have referred, may have the erysipelatous character; that is to say, may manifest a disposition to spread more extensively and rapidly than common inflammation. In fact, we frequently hear of medical practitioners speaking of erysipelatous inflammation of the conjunctiva, erysipelatous sore throat, and of erysipelatous inflammation of the various mucous membranes, as if the truth of the Hunterian doctrine were fully established; but, gentlemen, this is not exactly the case, many intelligent members of our profession not yielding their assent to it. Perhaps the majority of them do not admit, that erysipelas can originally affect any other parts than the skin and the subcutaneous cellular tissue.

In vulgar language, the disorder is called *St. Anthony's fire*, and when it is of a light yellowish red tinge, it is sometimes called the *rose*, a term employed not only by us, but by the Germans and French. The most useful division of erysipelas is into the *simple* or *superficial*, the *oedematous*, and the *phlegmonous*, the distinguishing features of each of which varieties I shall presently explain.

When the skin is merely affected with redness, is not perceptibly swelled, has no vesications upon it, is of its natural softness, and not attended with any severe symptoms, the case is then considered to be erysipelas in its slightest form, and is sometimes termed *erythema*. However, the latter expression is used in various senses, often signifying any efflorescence or redness of the skin, produced by mere local irritation, without the peculiar state of the constitution which is to be considered as predisposing to erysipelas, or having any thing to do with the production

of the affection of the skin. Then some practitioners apply the term *erythema* to rapidly spreading inflammation of the cutaneous texture, unpreceded by fever; and the name of *erysipelas* to a similar kind of inflammation, that follows as a regular consequence of a specific febrile disturbance of the constitution. Many expressions, occasionally adopted, are at least superfluous: thus, what is called *malignant*, or *gangrenous* erysipelas, is merely a stage of *phlegmonous* erysipelas, and not a distinct variety itself; it is, in fact, that stage of phlegmonous erysipelas, in which suppuration and gangrenous mischief have occurred. Then, gentlemen, you will sometimes hear of *bilious* erysipelas, which is so called when attended with much derangement of the digestive functions, and particularly of those of the liver. The *erysipelas erraticum*, as it is named, is that in which the disease has a great disposition to wander about from one part of the body to another, sometimes getting well in one situation, but attacking another; and thus the disease will sometimes go on for a very long time without coming to a termination. About two years ago, I attended a patient who had erysipelas of the right leg, preceded by febrile symptoms; the disease then extended successively to the right thigh, the right buttock, right side of the abdomen and chest, thence to the shoulder, nape of the neck, and scalp. Afterwards it descended on the other side of the body to a considerable extent before it stopped. After its cessation a calculation was made, that it had travelled over at least two-thirds of the whole surface of the body. When erysipelas has this extreme disposition to spread, or rather wander, over the body, it usually subsides in one situation, as it is extending itself in another.

*Simple*, or *superficial erysipelas*, is that form of the disease which affects chiefly the skin, and does not seriously involve the subjacent cellular tissue; it is, however, generally attended with a certain degree of effusion in the cellular membrane directly under the cutis; but, though the cellular tissue may have serum effused in it, no material degree of inflammation prevails in it, the skin being the texture chiefly affected. The skin is of a bright red colour, which terminates abruptly at a defined line, the redness not being gradually lost in the surrounding parts, as in phlegmonous inflammation. In the latter case, the redness is shaded off and insensibly lost at the circumference of the swelling: here then we find one remarkable point of difference between phlegmon and erysipelas.

In erysipelas, gentlemen, the redness disappears on pressure; that is to say, if you press with the end of your finger on any part of the inflamed surface, a white spot will remain for a few seconds after your finger is removed, and then be effaced again by the return of redness. Another difference, between phlegmon and erysipelas, is, that, in the latter, there

is no sensation of throbbing; at least, not in the simple or superficial form of the complaint. If the skin alone be affected, there is scarcely any perceptible swelling, and no tension, the part retaining almost its usual softness; yet, if you pass your fingers along it, you will be able to perceive a difference in its feel from that of the integuments in a healthy condition; perhaps, a trivial degree of stiffness may be recognized. Except in the very slightest cases, there is always some effusion in the cellular membrane, and consequently, a degree of swelling, softish, and not remarkable for tension. The inflamed part is hot and painful: at first, the patient feels a pricking, itching sensation in it; but, by degrees, this becomes a burning kind of pain, exceedingly acute when the part is handled. Frequently, the disease produces vesications, but not always. When vesications do form, they are mostly of the small miliary kind, but occasionally they are much larger, so as to be named *bullæ* or *blebs*, and to resemble those which result from the application of a blister. These raised portions of the cuticle generally contain a yellowish fluid, but sometimes a gelatinous substance, and in other instances, a bloody, or even purulent liquid. When they burst, incrustations are produced, which, in a few days, fall off, leaving the subjacent skin sound; but, sometimes, affected with superficial ulceration. Simple erysipelas most commonly terminates in resolution, with a desquamation, or peeling off of the cuticle: if the disorder be slight, however, there may be no desquamation. When the inflammation has been more severe at some points than others, you will sometimes notice limited suppurations in the cellular membrane; but these only happen where the inflammation extends more deeply than usual, and affects the cellular membrane in certain situations in a more severe degree than others. It is the nature of simple erysipelas to extend itself rapidly, and hence it will frequently pass over a large extent of surface in a very short time. Another feature in the complaint is, its disposition to get well on one side, while it is spreading in another direction. It is on this account, that you may frequently observe the disorder in all its different stages in one and the same person at the same period. In one place, that which was first attacked, there is perhaps desquamation; in the part last affected, there is redness and swelling; at other points, vesications; in other places, incrustation; and in a few situations, if the disease has been severe, possibly a degree of suppuration.

As the inflammation declines the redness fades, the part then frequently exhibiting a yellowish tinge. One striking difference, between phlegmonous and erysipelatous inflammation, is, that phlegmon is circumscribed, whereas erysipelas spreads without limit, or is diffused. I have mentioned, that in phlegmon the redness is gradually lost in the surrounding skin, while, in erysipelas, it is terminated by

an abrupt line. Now, in phlegmon, the swelling is circumscribed, but, in erysipelas, though the redness has an abrupt termination, the *swelling* has not a defined boundary, there being no limit to the extension or extent of the disease by the adhesive inflammation, as is seen in the other form of inflammation. In phlegmon, coagulating lymph is effused in the cellular membrane, whereby the inflammation becomes bounded, and a circumscribed appearance given to it; but nothing of this sort is manifested in erysipelas, here you have little or no adhesive inflammation, by which the extension of the disease is effectually kept within a certain limit. Gentlemen, it is from erysipelas not being bounded by the adhesive inflammation, that suppuration, when it unfortunately takes place, gives rise to extensive mischief; for the matter insinuates itself into the cells of the cellular texture, where a great deal of sloughing is frequently the result. However, such mischief is more commonly illustrated in *phlegmonous* erysipelas than in the *simple*, or *superficial* form of the complaint.

The most dangerous example of simple erysipelas is that which attacks the head and face, preceded by shiverings, head-ache, loss of appetite, accelerated pulse, and vomiting; and afterwards attended, not only by most of the common symptoms of fever, but, in severe instances, with a lethargic drowsiness, a tendency to coma, or even delirium. When delirium occurs, the disorder is often fatal. The indisposition does not subside on the breaking out of the cutaneous redness on the second or third day, but continues till the local inflammation itself abates, which generally happens, under successful treatment, about the tenth or eleventh day, attended by copious evacuations from the skin and kidneys. In erysipelas of the face, if any parts suppurate, they are usually the eyelids, the cellular texture of which is particularly loose. In this description of erysipelas, the swelling of the eyelids, and, indeed, of the whole face, is such as to prevent a person from knowing his most intimate acquaintance, one that he is in the habit of seeing every day; the disfigurement indeed is prodigious. As the cellular membrane must be much involved, this case, in a severe form, must partake of the nature of phlegmonous erysipelas.

*Phlegmonous erysipelas* differs from simple or superficial erysipelas, in the higher degree and deeper extent of the inflammation, which not only affects the whole thickness of the skin, and the subcutaneous, adipose, and cellular textures, but has a great tendency to produce, in the latter part, extensive suppuration and gangrenous mischief: the skin itself being more highly organized, resists the effects of the complaint longer than the cellular tissue; but, at length, it is frequently involved in the sloughing, though to a considerably less extent. The fasciæ are sometimes believed to be one of the principal textures for the attack of phlegmonous erysipelas; but dissections prove, that they are never *primarily* affected, and some



times not at all; we may, therefore, safely conclude, that erysipelatous inflammation does not essentially and necessarily involve the fasciæ. In phlegmonous erysipelas, the skin is more raised, the swelling harder, and the redness of a much deeper and darker colour than in simple erysipelas. In the simple form of erysipelas, the colour is a bright redness, but that of phlegmonous erysipelas is frequently a brownish red, or a redness with a dark livid tint about it; occasionally, the discoloration is not uniform, but irregular, so as to give the part a mottled or marbled appearance. In phlegmonous erysipelas there may be a degree of throbbing, as in common inflammation, the sensation of heat and pain, which is at first slight, afterwards becomes particularly severe, and the swelling such, that the part becomes twice its natural thickness. I am sure, that I have seen the limbs sometimes enlarged even in this degree by severe attacks of phlegmonous erysipelas. In the beginning, the swelling yields to pressure of the fingers, or *pits*, as the expression is, that is, a hollow is left for a little while in the surface, after it has been pressed upon, but the parts soon become thicker and firmer, and make more resistance to the touch.

The vesications in phlegmonous erysipelas are usually of the minute military description, and sometimes contain a purulent fluid; if the disease proceed further, the cellular membrane sloughs, and there is a considerable aggravation of the febrile symptoms. The suppurative stage is not attended with additional swelling, elevation, and pointing, as in common inflammation, but rather with a diminution of the tension, a feel of softness, and a subsidence of the swelling. If the surgeon puts his fingers upon the part, it feels as if there were matter deeply lodged under the skin, or (as some surgeons express themselves) it communicates a *boggy* sensation; this expression has been a good deal criticised, but, perhaps, we must agree with Dr. Duncan, that it would be very difficult to find another phrase equally expressive of what we wished to signify. When suppuration takes place, the too frequent consequences are extensive separation of the skin from the subjacent parts; of the muscles from each other; sloughing of fasciæ and tendons; inflammation of the synovial membranes; the formation of matter in large joints; and the ulceration of cartilages. Such effects may be specified as part of the mischief arising from the worst forms of phlegmonous erysipelas. Of course they are unavoidably joined with severe disturbance of the whole system, followed after a time by extreme debility, and often by symptoms very much like those of typhus fever. I need scarcely observe, gentlemen, that many of these cases prove fatal; but, if the patient should recover from the disease, after it has been productive of so much local and constitutional disorder, if he should be able to bear the long and profuse discharge, and to survive the time requisite for the de-

tachment of the numerous sloughs; the textures are all so impaired, and the skin, fasciæ, muscles, tendons, and bones, so agglutinated together by preternatural adhesion, that the functions of the part are permanently injured. Weakness and lameness must for ever continue.

In common, with many other practitioners, I have always regarded erysipelas as an inflammatory disorder. In the phlegmonous form of it, the pulse is at first full, hard, and frequent; the blood also presents the inflammatory crust, and the excavated, or cupped surface; indeed, I believe, no rational doubt can be entertained about the propriety of classing erysipelas with inflammations, when it is recollected that, where redness, swelling, heat, and pain exist, inflammation must always prevail.

Another form of erysipelas is the *œdematous*, in which the skin is of a yellowish brown, or dark red colour, and *pits* on pressure, in consequence of the cellular membrane being in a state very similar to what is seen in common œdema. The disease comes on more gradually than other forms of erysipelas, but it is not the less dangerous, because it never occurs except in constitutions broken by intemperance, or other causes; it is accompanied with a feeble, quick, irregular pulse; extreme prostration of strength; great disturbance of the stomach; and a remarkable tendency to coma and delirium. This account will lead you to conclude, that œdematous erysipelas frequently has a fatal termination. The vesications are in general minute and numerous. It occurs, as I have said, only in broken constitutions, and when the head and face are attacked, the danger is urgent, death often taking place about the seventh or eighth day.

Gentlemen, in considering the causes of erysipelas, you will naturally inquire, why any local irritation should produce in one person erysipelas, and in another only common inflammation? This fact is difficult to explain, unless we admit that some peculiarity in the state of the constitution is acting as a predisposing cause of erysipelatous inflammation. The existence of such a condition of the system can hardly be doubted, because we find erysipelas sometimes prevailing as an epidemic in particular seasons and states of the atmosphere, and in certain districts and hospitals, where temporary or local circumstances may be presumed to be exercising a pernicious influence over the health. A few years ago, Dr. Wells published some cases and remarks in the Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge, tending to show that erysipelas is sometimes contagious. The same suspicion had been entertained, at an earlier period, by the celebrated Dr. Cullen of Edinburgh; but the point is one that is not yet entirely settled. If erysipelas be contagious, its communication on this principle is, at all events, far from being common, and hence you find in the minds of the vulgar, who are ever so ready to suspect in-

fection, no apprehension of catching the disorder by attendance on the sick. If erysipelas is to be accounted contagious, because many individuals in the same town or hospital are sometimes attacked by it, we should not forget, that such individuals are all generally exposed to the influence of the same causes and to the same localities, whatever they may have been, which led to the production of the first cases. The patients have been living in the same atmosphere, perhaps under the same roof, or on the same soil and food, or within the influence of circumstances of a limited and local description, not affecting the general mass of society. Hence it is as difficult to decide about the epidemic, or contagious nature of this affection, as it is with respect to the same question in relation to many other diseases.

Among the exciting causes of erysipelas must be enumerated fever of a specific kind, and various accidental injuries and local irritations. Exposure to a current of cold air will often excite it. I mentioned that erysipelas follows the fever, to which I refer, in the same manner as other cutaneous affections follow the exanthemata, as they are termed. But we may infer that erysipelas will not be excited, unless the constitution be under the influence of circumstances, creating a predisposition to this form of inflammation. But you may ask, how can we adopt the doctrine of a peculiar state of the constitution being requisite for the production of erysipelas, when we know, from experience, that it is the nature of the disease frequently to be getting well on one side, as fast as it is spreading on another? This is a fact, which cannot be disputed. Probably the parts of the skin which have been already affected lose, for a time, their susceptibility of the complaint, which, as far as the cutaneous inflammation is concerned, appears to be incapable of lasting beyond a certain time, in any one part of the integuments.

Gentlemen, with respect to the prognosis, I may remark, that simple erysipelas, not of great extent, and unaccompanied by coma, or delirium, generally has a favourable termination about the eighth or tenth day. I have attended worse cases, which lasted six or eight weeks, quitting one part of the body and proceeding, successively, to others, and leaving, for a considerable time after the subsidence of the disorder, a tendency to inflammation of the mucous membrane of the organs of respiration, to a kind of chronic bronchitis, singularly distressing to the patient, and followed by profuse expectoration. In other instances, the mucous membrane of the alimentary canal seemed to be the principal seat of irritation.

After the termination of simple and phlegmonous erysipelas, you will often notice a remarkable disposition to the formation of boils and circumscribed abscesses. One young woman, whom I attended about a year and a half ago, was attacked with one or two circumscribed, but very fetid, abscesses of the leg, on the decline of erysipelas in other parts; these

small abscesses were followed by a more considerable and deeper one in the hip, which ultimately proved fatal. The case was excessively tedious; for it lasted, on the whole, about two months.

When the cutaneous inflammation suddenly recedes, followed by coma, or great oppression of the respiration, indicative of effusion in the brain or lungs, the danger is urgent. I should mention, however, that, in case of the patient's death, you will not always find in the head marks of inflammation. Dr. Baillie examined the brains of several patients who had died comatose in erysipelas, but without being able to trace any morbid appearances within the cranium.

When phlegmonous erysipelas has produced extensive suppuration, and sloughing of the cellular membrane, it is frequently fatal. The greater part of a limb is sometimes in this state; and when an opening forms, you may draw out portions of mortified cellular membrane, which look like pieces of wet brown paper. Dead tendons and considerable fragments of sloughy fasciæ, also frequently admit of being removed. Erysipelas of the head and face, *cæteris paribus*, is generally more dangerous than that of the body or extremities. In the latter situation, phlegmonous erysipelas, with suppuration, is a severe and dangerous affection. Lastly, œdematous erysipelas, which takes place only in bad and broken constitutions, often has a fatal termination.

With respect to the *treatment of simple or superficial erysipelas*, I may observe, gentlemen, that mild cases of it are easily cured, as they generally yield to saline purgatives, diaphoretics, and low diet. You may prescribe one ounce of sulphate of magnesia, dissolved in five ounces and a half of mint-water, with half an ounce of the liquor antimonii tartarizati: of this mixture the patient may take two table-spoonfuls every three or four hours, according to the effect; or you may give calomel, joined with James's or the antimonial powder, followed up by small doses of the sulphate of magnesia dissolved in the common saline mixture, or the effervescing saline mixture, which is to be administered at intervals, while the patient is restricted to a very low diet. In more severe cases, bleeding from the arm will be required, and especially the free use of leeches, which should be applied numerously, and as often as circumstances may demand. This kind of treatment will always be called for when the patient is young and robust, and especially when erysipelas is situated on the head. In the latter case, I should recommend bleeding, though the inflammation were slight, because experience proves, that if active measures be not adopted when the disorder attacks the face or scalp, the patient will frequently be lost, disturbance of the intellectual functions, drowsiness, coma, or delirium, sometimes coming on at an early period.

When erysipelas is complicated with gastric

disorder and derangement of the biliary secretion, you may prescribe an emetic, and follow it up by brisk purgatives, particularly calomel and antimony. When speaking of the causes of erysipelas, I might have hinted at the old doctrine, that it arose from the presence of bile in the blood, an opinion, however, now abandoned. In many cases of erysipelas we do notice more or less disorder in the functions of the liver; but, the notion of the hepatic derangement acting as the cause of the cutaneous inflammation, seems a completely gratuitous and fanciful hypothesis.

A few years ago, erysipelas was often supposed to be essentially connected with debility. This erroneous view of things had a pernicious influence in practice, because it interfered with the right treatment of the complaint. What is worse, it was a view adopted about forty years ago, in several schools of the highest repute in this country, and of course extensively acted upon in the treatment of the disorder. Depletion was altogether omitted even in the early stages of erysipelas, and a blind confidence placed in Peruvian bark; but, gentlemen, we now know that no particular medicine, whatever it may be, is proper for all the stages of the disease. Each stage calls for variation in treatment: in one, it is necessary to bleed; in another, to give tonics; in a third, not only tonics, but stimulants; therefore, if you were to give bark and ammonia (for ammonia was likewise recommended) in all cases, and in every stage, you would certainly lose many of your patients. One thing may be mentioned, as having led to much deception; namely, bark has no great power of increasing inflammation, or of doing positive harm, itself; its employment only being injurious, inasmuch as it leads to the neglect of antiphlogistic measures. I believe it is now generally understood, that bark will not, of itself, render the inflammation worse, and it is therefore less objectionable, even in the early stages of erysipelas, than ammonia, which would really increase the inflammation. However, in the later stages of the disorder, accompanied by debility, bark, and especially the sulphate of quinine, and the diluted sulphuric acid, and other tonics, are medicines of considerable value, but they are not those with which the treatment should commence. Many practitioners do not treat erysipelas actively enough at first;—they have the fear of debility too much before their eyes; they seem to regard erysipelas itself as a proof of weakness; and this idea, by preventing them from adopting sufficiently active antiphlogistic means in the commencement of the disease, is the occasion of numerous lingering cases, and fatal results.

## CLINICAL LECTURES

AT THE

MEATH HOSPITAL, OR COUNTY OF  
DUBLIN INFIRMARY,

DELIVERED BY

DR. GRAVES, M.R.I.A.,

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(Corrected by himself.)

SESSION 1832-33.—LECTURE VI.

*Comments on various Diseases.—Swelled Leg.—Inefficacy of Mercury in Typhus, Iritis, Cholera, Gout, and Rheumatism.—Value of Turpentine in Epilepsy, Convulsions, Tympanitis, and Low Delirium of Fever.*

GENTLEMEN,

You will be pleased to observe, that this day's lecture will not be confined to the consideration of any one disease, or any particular case, but will include a number of observations, which I have already made in the clinical wards at the bedsides of the patients, concerning various topics connected with the nature and treatment of their complaints. These observations suggested themselves to me at the moment they were uttered, and consequently they were expressed without the benefit of previous reflection. To remedy this defect, and, in order to present to you these remarks not only in a matured, but also in a more connected form, so as to compose, as it were, a fasciculus of fragments, that in an insulated state would have escaped from your memory, is the object of the present lecture.

You remember I made several observations on that painful swelling of the lower extremities which occurs during the progress of fevers, but more particularly towards their termination. The first particular description of this disease is to be found in an article in the Edinburgh Medical and Surgical Journal, written by Dr. Tweedie. The ancients and Dr. Tweedie's predecessors seem, however, to have had some notion of this disease, for they paid very great attention to this as well as to other local affections, such as boils, abscesses, eruptions, &c., which appeared towards the termination of fever; being of opinion, that in such cases, the fever was thrown upon the surface or extremities. Since Dr. Tweedie's paper, many observations have been made on this subject; and you will find some remarks on painful swelling of the legs after fever, which Dr. Stokes and I have published in the fifth volume of the Dublin Hospital Reports, to which I refer you. It is very remarkable, that the woman who was attacked with this disease, and who is at present in the female ward, was treated by Dr. Stokes for enteritis, and had her mouth affected by mercury, and yet the pain and swelling of the leg came on

during salivation. Now, you are all aware that many persons would propose mercury as the best means of promoting the absorption of the fluid which causes the swelling; yet here, at the very moment when the mercurial action is exerting itself in its full energy, the swelled leg appears. Facts analogous to this are of no uncommon occurrence. I have seen a person, labouring under mercurial irritation, seized with common fever, which afterwards became typhus, and proved fatal in five days. Still you will hear persons say, that if you get a fever patient under the influence of mercury, you will cure the disease, and that mercurial irritation will protect a man against fever. I have known jaundice to appear during a course of mercury; and every one knows how frequently iritis occurs under such circumstances. You will recollect, that I mentioned before a case of cholera which I attended with Mr. Maurice Collis, where the patient was salivated, and yet the stage of collapse came on, and a fatal termination ensued.

The disease to which this swelled leg bears the closest analogy is phlegmasia dolens, an affection which appears after child-birth, and generally attacks but one leg. The differences between them are, first, the swelling after fever has not the remarkable whiteness of phlegmasia dolens; in the next place, it is not so exquisitely tender and painful; again, the swelling is generally partial, and does not involve the whole limb, as phlegmasia dolens does; and lastly, its approach is more gradual, and does not, like phlegmasia dolens, originate and arrive at its *acme* in a few days. The characters which they possess in common are, that in both cases the disease is accompanied by a loss of power in the limb (as you may have perceived in the woman above stairs), both present a degree of swelling, increase of temperature, absence of the natural florid hue of the skin, and effusion into the subcutaneous cellular membrane. Another point of similarity is, that the veins and lymphatics are apt to become inflamed, and, as a consequence of this, the former may sometimes be obliterated, and you will find the saphena reduced to an indurated cylinder, resembling a piece of whipcord. Some persons look upon this inflammatory affection of the veins as the original cause of this disease, as well as phlegmasia dolens. This I doubt. It does not always occur; and I have seen a case of painful swelling of both legs after fever, and found the saphena vein inflamed in one leg but not in the other. Again: in swelled leg the phenomena are to be reconciled with inflammation of the vein. To be sure, if you tie a vein you will produce œdema of the corresponding limb. But if inflammation of a vein, and consequent obstruction to the flow of blood, be the cause of the swelling, which appears in this disease, the swelling should naturally commence below and proceed upwards. This was not the case in this woman: the swelling commenced above, a circumstance which is totally irreconcilable

with our notions of the effects produced by inflammation and obstruction of a vein. I have observed, in cases of swelled leg, that inflammation attacked the knee-joint, went on to ulceration of the cartilages, and finally terminated in ankylosis. Here the inflammation passed from the subcutaneous cellular membrane to the lining membrane of the joints, and so on to their cartilages, leaving the veins untouched. About three years ago, Dr. Stokes and I attended a gentleman who had a large swelling of this kind. For several months he was unable to use the limb, and the torment which he endured was excessive; even still the affected limb is evidently thicker than the other.

Painful swelling of the extremities is a disease calculated to arrest the attention of the physician, and to draw largely on his ingenuity and patience, for in every instance where it appears it is extremely troublesome. In the first place, the patient's constitution is not improved by it; it serves to keep up his fever, and he can count on a great deal of bad health produced by the pain, loss of rest, and confinement, which invariably accompany this disease. It may also leave behind it a permanent enlargement of the leg. Every physician should, therefore, be naturally anxious, when this swelling appears, to get rid of it as soon as possible. Now, if you look to Dr. Tweedie's paper, and to what Dr. Stokes and I, as well as others, have written on this subject, you will find the treatment very variable and uncertain. Looking to the phenomenon of the disease, as manifested in the increase of size, pain, tenderness, and heat; we applied leeches along the course of the veins, used stupes and poultices, and gave calomel, narcotics, and finally iodine. All these remedies we tried separately, or conjointly, and yet the disease went on sometimes for month after month. You will see, from what Dr. Stokes and I have published on the subject, that narcotics are good, and produce considerable benefit, but still that we were not possessed of any decided mode of cure. In the present case, however, a new plan of treatment has been tried, at the suggestion of Mr. Nichols, of Dawson-street, and this consists in trusting solely to the immediate application of successive blisters to the affected parts. We began by blistering this woman's leg, along its anterior surface, from the instep to a little below the knee; in two days afterwards we applied another, from the lower part of the calf to the ham, and lastly, we blistered her again on the instep and knee. The consequence of this was, that, after the application of the first blister, which had a very copious discharge, the swelling began to diminish; the next thing was the cessation of pain, and, at present, the woman's leg is quite free from any symptom of the disease. Those who have witnessed the trial of this remedy will testify that it is much more rapid and effectual than any hitherto employed. The value of this treatment, however, is not to be

considered with reference only to the rapidity of its effects, but also with respect to its relative efficacy. A disease may be cured in the same length of time by two different means, and yet one mode of treatment may have an essential advantage over the other. By the former plans of treating swelled leg, we not only had a tedious and protracted cure, but also, from the remedial agents employed, our patient's health remained in a debilitated state; whereas, by the use of blisters, we cure the disease in a much shorter period, without any consequent weakness or debility. I look, therefore, on this as a very valuable practical improvement, and I have the authority of Mr. Nichols to state, that many cases have come under his observation in which it proved decidedly successful.

I shall now proceed to make some observations on other forms of œdema in the sub-cutaneous cellular tissue. I have told you, that this inflammation, which comes on during fever, may be transferred to the joints, and may proceed so far as to cause ulceration of their cartilages and ankylosis. Here we have the inflammation passing from the subcutaneous cellular tissue to the joints; but it is a curious circumstance, that you will sometimes, on the contrary, find arthritic, or rather true gouty inflammation transferred to the cellular tissue, and not affecting the joints. It is a common opinion, that gout attacks one part, rheumatism another, and so on of other diseases, and that you are, therefore, to look for rheumatic, or gouty inflammation, in the part in which it is usually known to appear. All this is very physiological, and is put forth with great confidence in books, but unfortunately it is not true, for there is no tissue in the body which gout may not attack. A gentleman (and I have witnessed such cases) gets an attack of gout in the great toe, which becomes swelled, tender, and painful; the ankle-joint next becomes affected, he goes through a regular course of podagra, and the disease subsides. Some time after this, he is exposed to damp, or takes too much wine, and the gouty inflammation reappears. The integuments are now found to present a puffy appearance, there is increased heat, very little redness, the œdema is considerable, but the joint is not affected, and there is scarcely any pain. The puffiness extends over the instep, surrounds the ankle-joint, and then stops. The sub-cutaneous inflammation is pushed to the utmost extent, and the œdema equals that which occurs in anasarca, the integuments are also affected, but the joint remains intact. Here is a case of gout, and in a person of well marked gouty diathesis, limited to the sub-cutaneous cellular tissue. An old gentleman, of full habit, sent for me on one occasion, to consult me about an attack of this kind. The redness in this case was remarkable, the ankle was enormously swelled, the skin was tense and shining, and looked so like erysipelas, that an hospital student would say here is erysipelatous inflam-

mation and it must be looked to, and he would immediately adopt a very active mode of treatment. As this gentleman was old, I contented myself with simply making him go to bed, and take a little aperient medicine, and on the next morning I found the inflammation greatly diminished. Do I counsel, then, that in all such cases of gouty inflammation you should be satisfied with the employment of constitutional treatment alone? Not at all, for if the inflammation goes on, you will have recourse to local means. I knew another case of a gentleman, who had this gouty inflammation of the ankle-joint in a severe form. After some time the pain of the joint subsided, but the œdema which accompanied it remained for months. For this he was attended by two of the first professional men in Dublin, who both ascribed the swelling to a morbid indolence of the parts, and came to a determination to refrain from meddling with it entirely. Gentlemen, we hear a great deal about the indolence of sores, and tumours, &c., and you will find long dissertations on indolent ulcers in *Cooper's Surgical Dictionary*, and other works, but my belief is, that morbid action is much less disposed to be indolent than we are ourselves. I remember the time, that our hospitals abounded with indolent ulcers, which, when you came to examine, so far from discovering indolent action, you could perceive at a glance evident traces of very great, but unfortunately misapplied, industry on the part of the sore and the neighbouring integuments. Is it because the integuments are thickened, or indurated, round a sore, that you will term it an indolent ulcer? Is it because, while the surface of the open sore remaining the same in extent, it daily discharges an enormous quantity of unhealthy matter, that you will call it indolent? Such circumstances, and others, are rather evidences of increased action than of indolence. I may be permitted to say here, that I was the first in Dublin, who, disregarding the theories of Sir Everard Home, which are followed in most surgical works of reference, introduced the practice, not merely of attending to the surface of the sore, but also the surrounding integuments; and I remember the astonishment of the students when I cured, by mere leeching round the integuments and poulticing, an ulcer which had been marked out for operation by one of the first surgeons in Dublin, in another hospital, and which had been diligently treated and pronounced incurable in the surgical wards of this Institution. The improvement I introduced was readily adopted, and I had thus the satisfaction of contributing something to surgery in return for the many and important improvements which some of the surgeons of this hospital had conferred on medicine. In the case of œdema remaining after gouty inflammation, which I have mentioned before, the physician was of opinion that it was the result of morbid indolence, and declined making any topical application.

Looking on the swelling as the result of inflammation, I treated it with leeching, and it went away in a fortnight. The progress of this case was witnessed by Mr. Barker of Britain-street. I wish to impress this case on your minds. You have seen the inflammation in swelled leg relieved by blisters; you have seen that a similar œdema may arise from gout, and the question is, when this œdema remains after gouty attack, and is not relieved by leeches, what other means are you to have recourse to? The treatment of the case before you shows, that the best mode is blistering. I have seen, in some medical work, an account by Sir A. Carlisle of a gouty swelling, which he states his patient was very impatient to get rid of. He blistered the part, and the result was favourable. Gouty persons are indeed generally impatient, and whatever tends to remove this obstinate species of œdema is valuable.

In pursuance of my intention, I will now proceed to make a recapitulation of those hints which I have before given on the subject of convulsions, and the utility of spirit of turpentine in this and other forms of disease. You are aware that there is a woman, at present in the hospital, whom we are treating for epilepsy. She is taking arsenic in moderate doses, which we intend afterwards to increase. I may remark, that this treatment is founded on the circumstance of arsenic being a powerful tonic and alterative. Nitrate of silver has also been employed in curing this affection, but is attended with inconvenience in large doses, from its tendency to discolor the skin, and hence arsenic has been introduced as a substitute. This woman was under my care about eighteen months since, in Sir P. Dun's Hospital, for the same complaint. It was at that time connected with hysteria, and you know it is no unusual occurrence for hysteria to pass into epilepsy. I treated her then with large doses of the spirit of turpentine; the fits went away, and she remained well for nine months, when the disease returned again, but in a milder form. I have introduced this case for the purpose of speaking on the powers of turpentine as a therapeutic agent. On the effects of this medicine a good deal has been written in a scattered and unconnected form, but we have no regular treatise on its peculiar properties. We find that it possesses the power of checking epilepsy, a violent convulsive disease, as it appears by this woman's case, and this was totally unexpected by me, and is a thing which I cannot explain. I will not say, as a London lecturer has done, "that in epilepsy there is a heaviness of head, and that turpentine produces a lightness of head, and in this way cures the disease." Such an explanation as this, gentlemen, I believe you would not think sufficient; and not knowing the *modus operandi*, I shall pass over this subject. Besides convulsions of epilepsy, there are several other diseases in which we prescribe turpentine with benefit. In the first place, it is given

with advantage in cases of intestinal irritation during fever, where the mucous membrane is in a state of engorgement. Here the natural secretions are deranged, and a vast quantity of air is generated from the mucous surface, producing excessive tympanitis. I remember having attended, with Dr. Stokes, a very fine young man, whose fever went on without any particular bad symptom until the twentieth day, when matters suddenly became worse, and heat of skin, thirst, delirium, and subsultus tendinum, set in. On the thirty-fifth day he was extremely bad. There was no particular organ affected, and he presented a remarkable example of general disease of the whole system. Diarrhoea then commenced; his belly became enormously swelled and tympanitic; and, on the forty-second day, he appeared moribund. We had been trying various remedies, and, in despair, gave him a large dose of turpentine; I believe, an ounce and a half. This was followed by the discharge of a vast quantity of wind; the delirium and subsultus tendinum subsided, and he got a perfect crisis with sweating. You see, therefore, that in the tympanitis of fever, as well as in the tympanitis of hysteria, this remedy is of the greatest value, and of this I could bring many proofs. A patient in fever, who has an enormous quantity of wind in his bowels, feels exceedingly uncomfortable; he is hot and restless, for the flatus, by keeping up distension of the bowels, keeps up also pain and irritation. While on this subject, I will mention another mode of getting rid of this troublesome flatus. Mr. McDowel and I attended a young gentleman, who felt very great distress from this kind of distension. An œsophagus tube was introduced very high up into the gut, and an immense quantity of wind discharged, to the great relief of the patient, who was so much pleased with the experiment, that he would not let the tube be taken out for nearly three days, and you could every now and then hear the whizzing of wind through the tube, like air passing into the nozzle of a bellows. In another case, attended by Mr. Kirby, Mr. Cusack, and myself, a young surgeon used, every day, to pump out the air, and even brought away matter from the bowels by the last action of the syringe.

Having now recommended to your notice this admirable carminative, I shall revert to the consideration of the medical powers of turpentine. Mr. Carmichael has shown, that oil of turpentine is capable of arresting the progress of iritis, and producing a cure. Dr. Jacob allows this, though he says he prefers mercury. Now, in iritis, we have distinct evidence of its power in checking inflammation. Have we any thing similar to this? Yes, we also find it useful in those inflammatory affections termed sciatica and lumbago, and in neuralgic diseases. I am inclined, therefore, to think, that turpentine has not only a specific action in congestion of the mucous membrane of the bowels, but also in

many other affections. There are two states of the system; the convulsions of infants at the breast, and the low delirium of fever, in which I have seen the efficacy of this medicine also; but as these are important subjects, and have not been accurately treated of in books, I intend to devote next Tuesday's lecture to this consideration, and thus complete, for the present, our purposed fasciculus.

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## CLINICAL LECTURES

DELIVERED BY

DR. ELLIOTSON,

AT ST. THOMAS'S HOSPITAL.

SESSION 1832-33.

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LECTURE VIII.

ECZEMA—PSOAS ABSCESS—ANEMIA, PRECEDED  
BY JAUNDICE—CANCERUM ORIS.

GENTLEMEN,

THE case to which I shall first draw your attention to-day was one of cutaneous disease affecting the hands; an inflammatory disease of the skin, accompanied with heat, smarting, and tingling. It was a vesicular disease, having a watery secretion under the cuticle. In diseases of the skin, you should first endeavour to determine whether they are inflammatory or not, and if you have ascertained the malady to be inflammatory, you must next examine whether it is a scaly disease, or an affection attended with the formation of matter, or serum, the former being called pustular, the latter vesicular eruptions. The disease under consideration was decidedly of an inflammatory character, and a thin transparent fluid was secreted under the cuticle. In this disease, there is generally great heat, the skin is frequently dry, but sometimes, on the contrary, it is very moist; it is the same as described by Willan, Eczema. We frequently find this disease confined merely to the hands, but sometimes it extends over the whole body. The best mode of treatment, that I have found in this disease, has been to treat it on the common principles of inflammation, bleeding, either generally or locally, applying cold to the affected part, give mercury, purge, and put the patient upon a slop diet; this was the treatment adopted in the case I am speaking of, with a beneficial result.

The woman was 25 years of age, had her hands full of cracks, which continued for eight months. Five years ago, she was under my care for the same complaint: when she came in the hospital this last time, I had her bled to a pint, and ordered her three grains of calomel every day; cold water was applied to the hands, and she was kept upon a low diet; after this I found it necessary to bleed her twice, to a pint each time. The irritation was

still very great, and the itching continued to distress her: I, therefore, had ℥j. of the prussic acid put into a pint of water, and applied to the affected part as a wash. If you use a larger quantity of this acid, though a deadly sedative poison, it will produce much smarting and tingling; and many of the most powerful sedatives are active stimulants; you will, in general, find one drachm to a pint as much as can be borne, although I have continually employed it stronger than this, but then I have increased it by degrees. Mercury, in this kind of cutaneous disease, I have found exceedingly useful, though, in some affections of the skin, it will do harm, but in this disease I have found it very beneficial. I only gave this patient mercury to affect her mouth slightly, which it did, then I discontinued it. She complained of her arms being very uncomfortable from stiffness, to relieve which I employed ointment. Now, you must bear in mind, the mildest grease will sometimes produce irritation: many skins, especially under disease, are so liable to be affected from it, that even the mildest grease you can apply will cause this effect, sometimes it will even produce violent inflammation; the substance, combined with the grease, in such cases, is generally attributed as the cause, when in fact it is the grease itself that produces it. There are, nevertheless, some diseases of the skin which bear it very well, and it is generally those which are not inflammatory. This disease is often kept up by local excitement: in washerwomen we frequently find it, caused by the alkali they are continually exposing their hands to, and after we have got them well, they go back to their old employment, and frequently, in a day or two, the disease returns as bad as ever. So, as long as you can keep away the exciting cause, they generally do well, unless the disease has been of long standing, and then the skin becomes so thoroughly predisposed to it, that it is scarcely possible to make any impression upon it.

There were two women, gentlemen, presented, who complained of pain at the pit of the stomach, great distension, and a thousand other indescribable things, such as we commonly find in young women. Now, we very frequently find them pretend these things, and often there is an inflammatory condition of the stomach; when this is the case, they are soon relieved by cupping and leeches; but, in the cases I am alluding to, I had every reason to believe there was nothing the matter with them, and they went out. I will not, therefore, dwell upon their cases any longer.

*Psoas abscess.*—Among the men, there was one case, which turned out to be psoas abscess. These cases are often mistaken for rheumatism, and, in the first instance, it is not an easy matter to make the distinction. I, therefore, will draw your attention to the case. When the sufferer was first admitted, I could not discover any collection of matter, but, from his symptoms, suspected he was labouring under psoas abscess, and that was the opinion I gave

to those accompanying me. Before seeing so many cases of this disease, I have been mistaken, and supposing there was nothing more than rheumatism, put down lumbago, when the case turned out to be psoas abscess. I could make no impression upon the disease; the patient has gradually sunk, and, after death, a collection of matter has been found. In this case, my opinion turned out to be correct. He was a young man, who said he had been complaining for a length of time of pain in his back. Now, in cases of young people, who have a scrofulous appearance, and have complained of pain in the back for a long time, as in this case, it is always a matter of suspicion; when there is pain in the back, accompanied with emaciation and increasing debility, you may always suspect there is a collection of matter, which will cause what is called psoas abscess. After this patient had been in the house a fortnight, a large swelling was discovered on the left side, in which fluctuation was perceived. The nature of the case now being evident, I requested Mr. Green to take charge of him, who has ordered an issue.

I merely mention this case to you, that you may be on your guard when patients complain of pain in the back. I recollect two instances of persons complaining of pain of this description, which was like rheumatism, and nothing more could be discovered. One of them died suddenly, and an aneurism, just above the bifurcation of the aorta, was found. It gave rise to no tumour, but pain in the back. I remember another case of pain in the back, but, on closely examining the parts, I found a pulsating tumour in the lower part of the loins, and the case was given over. It turned out to be aneurism of the aorta, just below the diaphragm, so that it extended all down, formed an immense sac, gave rise to a pulsating tumour in the loins, and at last pushed its way under Poupart's ligament, so that it was of an enormous extent. Now, if without a minute examination, we say the patient has got a pain in the back, and in a few days it will be well; the patient dies suddenly, or continues no better, and an abscess appears; the practitioner, of course, would be thought very ignorant. I, therefore, myself always make it a rule, to investigate carefully every symptom, to see if there are any circumstances about the patient to show whether the symptoms be trifling or serious. In this case, the long continued pain in the back, the emaciation, and his great debility, excited my suspicion, and, in the course of two weeks after his admission, a tumour appeared in the left groin.

*Anæmia, preceded by jaundice.*—There are two cases, which have terminated fatally, both of which are uncommon, though very interesting varieties of disease. The first was a disease called anæmia, in which the blood is not perfectly formed. In this case it was rather obscure, in consequence of the patient having jaundice. He was a man, forty-four years of age, who said he had been jaundiced

five months, for which he had been in Bartholomew's Hospital. When he came in, the jaundice existed just sufficiently for me to say so, and that was all; he was pale and sallow throughout, not yellow, but just slightly sallow; the conjunctiva, however, had a decided yellow tinge. From pressure over the region of the liver he complained of pain: and I certainly felt the substance of the liver hard, and larger than usual; his motions were yellow, showing there was no obstruction in the liver. It is very common for the yellowness of the surface to remain, after the obstruction has been removed, and the motions become yellow; for, in general, it is some time after the obstruction has been removed, before the blood clears itself of the bile, and until then, of course, the skin remains yellow. The liver, I have said, was large, and firmer than it ought to be; also slight tenderness, though not sufficient for me to bleed him, for at the same time he appeared very weak. Therefore, with regard to treatment, I contented myself by giving two grains of calomel every night, and at the same time had some iodine ointment rubbed over the liver. The jaundice disappeared, but the man got no better. I now observed that he became very pale, his lips in particular; his pulse was weak and sharp, and the debility increased; the eyes now became very white, and he complained of fulness about the stomach—palpitation. I had now a small quantity of blood—an ounce, taken, for the purpose of examining it, and found it very thin, much more so than it ought to have been. There was also a slight bellows sound heard in the region of the heart, which frequently is the case when the blood becomes thin, or much less in quantity than usual. He now appeared to me in a state of anæmia, although, as I am aware of, he lost no blood before he came, and after his admission I only took one ounce for the purpose before described. I allowed him meat and porter daily; at the same time ordered full doses of the carbonate of iron. He did not appear altogether reasonable at times; his mind appeared weak; and daily he seemed to lose strength; however, I could not discover any organic disease, excepting the hardness of the liver. He was always complaining of something. One day he had intense pain in the region of the liver, which was aggravated by pressing his leg. He still continued to get weaker; his pulse became quick, and he gradually sunk. Before I examined him, said I expected to find nothing more than a little enlargement of the liver; but, upon examination, there was nothing more than the usual appearances, after death, of those who fall victims to this disease. His liver, however, was harder and rather larger than it ought to have been; but this was not sufficient to cause death. The blood in the veins was very watery; and, in puncturing the inguinal vein, the blood that flowed from it was very thin, somewhat resembling red ink; the heart was



flabby and very pale; indeed, the whole surface of his body was much paler than natural. I could find no organic disease; and the cause of death appeared mere bloodlessness.

This disease you will find spoken of by French writers. Halle mentions this affection, and says, in one of the coal-pit galleries at Auzain, near Valenciennes, the men were taken first with pain in the bowels, vomiting, green evacuations, great thirst, and wasting, which lasted ten or twelve days, and then became bloodless; at the same time the white of the eyes became bluish, and the skin very soft and white; the mucous membrane of the mouth colourless; pulse rather full, and easily excited; respiration hurried on the least occasion; and I have no doubt, if they had listened, a slight bellows sound might have been heard.

This symptom, you will recollect, occurred here, in a woman, after flooding, from disease of the womb, a short time ago. The patient under consideration was in a state of bloodlessness, had constant thirst, and also œdema of the legs. The symptoms agreed with those spoken of by Halle. Iron appeared to be the best remedy there, combined with opiates, and they ultimately recovered. They tried mercury, but always found it do mischief, and if persevered in, destroyed the patient; but under the use of iron he got well. In most of the miners examined after death, nothing but bloodlessness could be found; then exactly the same appearances were discovered in the case I have been speaking of.

Dr. Combe mentions a good sporadic case in the Edinburgh Medico-Chirurgical Transactions, which terminated fatally. Several remedies were tried—iron amongst the rest, though not continued for any length of time. My reason for giving iron was, because I knew it to be the most powerful tonic with which I am acquainted, but more particularly on account of reading Halle's history of the miners at Auzain; but, in my case, it entirely failed. This is a very curious disease; and in what part of the body it is situated, I cannot say; but, as far as we can examine, it does not appear necessary that any structural disease should exist with it. Your prognosis would be much more unfavourable in this case, than those that occurred in the mines, which were caused, no doubt, from some emanations to which they were exposed. They were previously in good health; so you had only to remove the external cause, and the remedy you give would then have a fair chance, and cure the disease, as was the case. My opinion turned out to be correct, in saying we should find all the internal parts sound, excepting the liver, which was enlarged. It is a curious disease, and one that you will not see every day.

*Cancrum oris.*—The other case to which I am anxious to direct your attention, is one which you will not frequently meet with. It is a disease, I am sorry to say, I have never seen cured, though cases are related which

have recovered from it. It is the case of a child who had gangrene of the face: it being a curious case, I will read it from the notebook:—

“A. B., aged 17 months, admitted on the 15th November; the mother stated, she had been living in the Bethnal Green Road. About a month since the child was attacked with scarlet fever, which it had caught from some children in the house; she took her to a medical man in the neighbourhood, who gave her some powders for the child, but what they consisted of she did not know. At the decline of the fever, which lasted ten days, the child's mouth became sore, the ulceration extended along the alveolar processes of the upper jaw, the teeth of which fell out. The next morning there were two black spots, one on the upper lip, near the right ala nasi, and another on the lower lip, about a quarter of an inch below the right angle of the mouth; the lips and tongue appeared black, at least as much as could be seen of the latter, the child not being able to protrude it far. There was great thirst; no appetite; a costive state of the bowels; pulse weak, soft, and quick, 100; great emaciation of body. On the 16th, the ulceration and sloughing had extended considerably in the palate; the black spots were now about the size of a shilling; the lower one had extended through the gum, the other appeared to communicate with the mouth; the affected side of the face was very red and swollen. On the 17th, the sloughing and ulceration extended to about the size of half-a-crown, including a great part of the right side of the nose; the one on the lower had not extended so far. On the 19th, it kept extending very fast. The poor child could not bear the least light, and she drew the sheet over her face; she did not appear to suffer much pain. I had the part washed with a strong solution of nitrate of silver, which caused great pain without doing any good, so I ordered it to be discontinued. 21st. The part began now to look horrible; the gangrenous erosion continued to extend; the whole of the cheek was now nearly sloughed away, and the sloughing was now approaching fast the eye. On the 24th, the eye became affected; the sloughing continued. The unfortunate child did not now appear to suffer much, considering the nature and extent of the disease; she took nothing but beef tea; pulse small, 116. On the 27th, the sloughing had destroyed more than half the nose, extended up to the inner canthus of the eye, and had destroyed entirely the under eyelid; the ulcer on the upper lip had extended to the one on the lower, and entirely destroyed the parts. On the 28th, the child died.”

You will find a very excellent description of this disease in the fourth volume of the *Dublin Hospital Reports*, by Dr. Cumming; he considers it a variety of what some writers call *cancrum oris*. I will read it to you. He says,—“The most formidable variety of the disease is that which occurs in children be-

tween twenty months and seven years of age." This child was seven years of age. "The subjects of this form of the disease are generally of a pale, sallow, or bloated unhealthy appearance; they have most of them laboured under more or less irregularity of the bowels, and as they are almost exclusively the children of the poor, it may be naturally supposed, that deficient or improper food, scanty clothing, and impure air, may have materially contributed to its production. In every instance of this affection I have met with, the constitution had been much debilitated by the existence of previous and long-subsisting disease. In two cases that fell under my care, the disease occurred as a sequel of measles; in another, the advanced stage of dysentery; in a fourth, upon the termination of infantile remittent fever; but it is more generally observed at the close of the exanthemata than at that of any of the other acute affections to which children are liable." Dr. Marshall Hall, who has inserted a paper upon the disease in question in the 15th vol. of the *Edinburgh Medical and Surgical Journal*, states, that in all the cases which have come to his knowledge, this affection has been preceded by fever, acute disorder of the digestive organs, typhus, inflammation of the lungs, variola, rubeola, or scarlatina. This affection would therefore appear, says Dr. Hall, to be in some measure the consequence of exhaustion, debility, or irritation, produced by previous disease. Huxham witnessed a similar affection as a consequence of measles. In his report for July, 1745, he observes,—“I have more than once, during this month, witnessed a mortification of the mouth and fauces, besides a caries of the cheek and os vomeris, which occasioned a very painful death, and that too after the measles.” Dr. Willan remarks, in relation to scarlatina,—“In one infant, about the eleventh month, a considerable erysipelatous swelling affected the left cheek, and within three days produced a deep gangrenous eschar.” Most of the cases which I have seen followed scarlatina.

In this variety of disease, the ulceration is generally confined to one side of the mouth; sometimes one, but more frequently both gums are attacked, and the ulceration, which is extremely foul, and attended with fetor, spreads rapidly to the lips and cheeks, and seems to destroy partly by gangrene and partly by absorption. Should the disease continue its progress, the teeth fall out in consequence of the destruction of the gums and alveolar processes, and, in some cases, the jaw-bone itself is destroyed, so that, should the patient survive, no teeth are afterwards formed in that side of the mouth. The tongue, from its contiguity to the gums, takes on a similar diseased action, and is either wholly or partially destroyed, while, the cheeks and lips being sometimes eaten away, the bare jaw-bone, and the inside of the mouth, are exposed to the view, exhibiting the most loathsome and horrible appearance that can be conceived. As the

disease advances, the salivation and fetor increase; but, generally, before the destruction of parts has been carried to the extent I have described, the patient is carried off by a species of low fever and diarrhœa, analogous to which supervenes on gangrene of any other part of the body. Dr. Cumming describes three varieties of this disease, one in which the gums are first affected; they become, he says, purplish and spongy, and with proper treatment many of these may do well. The second is as I have been describing; and the third kind “commences by ulceration of the lining membrane of the lips, which is soon followed by that hard, red, shining, and circumscribed swelling, which, if the marked action be not arrested, will speedily pass into gangrene. This last form of the disease occurs sometimes in the pudentum of children;” and I have myself seen two or three instances of it. There was a very faithful and excellent description of it by Mr. Kinder Wood in the *Medico-Chirurgical Transactions*. Mercury has been attributed by some the cause of this disease, and sometimes it might be; for when given in excess, or when it acts violently from idiosyncrasy, and produces more effect than you intend, ulceration and gangrene of the lips may certainly take place. In many cases where this disease has occurred, after scarlatina or measles, mercury has been given. Whether this child had any or not I cannot say, but some white powders were given. Nevertheless, the disease, I think, may occur with the exhibition of mercury; and this appears to be the case from the experience of others. Certainly, when the disease has occurred in the pudenda, it could not be ascribed to mercury; and I have no doubt myself whatever, that the disease takes place sometimes without any connexion with mercury. With regard to treatment, where the disease is merely confined to the gums, and does not spread as in the case of this poor child, the disease is frequently cured; but in this case, where the cheeks became affected nearly as soon as the gums, and is attended with induration, heat, and swelling, from the beginning, I think very little aid can be given. The proper treatment is to administer tonics, and push them to the greatest extent you can. In all cases I have made a point of giving quinine in the largest quantity I could exhibit it, good nourishing diet, such as strong beef-tea, wine, porter, &c. Knowing the good effects of the nitrate of silver in some cases, I had it used here, but it did no good; on the contrary, it produced great agony, and I think the disease spread faster after it. Mr. Dease, an eminent surgeon, speaks of the beneficial effects of the internal exhibition of muriatic acid. Mr. Wallace states, he has cured many of the worst cases by the internal exhibition of the carbonate of ammonia, and the application of the nitric acid to the sore. Dr. Cumming states, that in almost every instance, the case will prove fatal, if it be one of the worst forms.

of the disease. He says, he is "aware that cases of recovery have occurred in the practice of others, but less frequently, he strongly suspects, than is generally imagined; and when the recovery does take place, after the extent of injury I have described, the loss of substance can never be repaired, so that the patient becomes an object of deformity for life." Then the treatment consists in supporting the patient, and of course attending to the bowels. Some speak of the good effects of the external application of the nitric acid, but I cannot speak from my own experience. It is a dreadful disease; and I have never cured a case when it has extended in this way.

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## REMINISCENCES

OF AN

### ARMY MEDICAL OFFICER.

PART I. CHAPTER IX.

"FINIS CORONAT OPUS." I had, at length, to look the *doctorate* in the face very closely, and with much apprehension.

At that time there were two graduation days, viz. June the 25th and September 12th. Now there is but one per annum, which is a more fair, if not a more convenient arrangement. Candidates were more numerous for June than for September for the three following reasons: 1st. many were impatient to have the ordeal over, and to get home as soon as possible; 2d. those rejected for June might be re-admitted to examination for September; and 3d. few, comparatively, chose the latter period, lest it might be suspected that they had been sent back from the former, or might be remanded till the following year. For my own part, I have no hesitation in declaring, that I did choose the latter. For, in the first place, I was too busy with the concluding studies of this my last summer, to recapitulate the business of the three preceding years. Besides botany and midwifery, I was an auditor of the first professor of legal medicine ever heard in Great Britain (Dr. Duncan, junior), and attended the first course of lectures even he ever delivered; and if I have omitted par-

ticular mention of his father, the professor of the institutes of medicine, I am willing that the omission be set down to motives which would, in all probability, have induced any cotemporary, writing the history of his studies, to observe a similar silence. But, secondly, I had not much apprehension as to being plucked.

I never saw the face of what is called a *grinder*. I wrote my little thesis without assistance of any kind. It was an unpretending performance, merely sufficient to serve the occasion, and to comply with rules and formalities. I went through no course of *rubbing up*. Indeed, I thought I did not require it; nor did I; nor will any student find it otherwise who will follow the example which my experience enables me to describe. I was punctual and attentive from the beginning; I stored almost every thing in my memory; I read few books, but these were of the best and most instructive description. I was, therefore, able to digest their contents without devouring great quantities of heterogeneous stuff, and I seized, above all things, every opportunity of putting my acquirements to the practical proof, in other words, of *feeling my way*. Thus, when I had the medical faculty to face, I entertained no dread as to the result of a fair trial. I had been well instructed in Latin elsewhere, and I relied upon that circumstance for language: I had taken cross-opportunities, if I may so express myself, of viewing and re-viewing every branch of medical science; and having been first dresser in the Infirmary, and afterwards a visiting pupil at the Dispensary, I was tolerably well furnished with ammunition and material. It only remained to be seen how these were to be employed.

The duration of the ceremonies, preparatory to graduating, occupied about six weeks. Having obtained a general certificate from the Secretary to the University (at that time my friend, Dr. Duncan, junior), notice of his design was forwarded to the Dean of the Medical Faculty, by the candi-

date. In due time, he received an order from this dignitary to attend at the private house of one of the members of the faculty, on a certain day, and at a specified hour. This, to the best of my recollection, was generally communicated about a fortnight before he was wanted. It was managed with the most delicate consideration for the candidate. The first examination was strictly private, no one being present excepting the professors belonging to the faculty and the *culprit* himself; no clerks, no spectators, no beadles, no parade whatever. In the course of a few sentences I shall describe this sort of adventure, as I underwent it myself. In the meantime, let me reveal what sort of especial preparation I made with a view to it.

There was an Irish gentleman studying medicine at the same time, between whom and myself an acquaintance of considerable intimacy was formed. He was a bachelor of arts of Dublin, a title which is considered highly honourable to the wearer, and indicative of diligent application and success in the acquisition of scholastic learning\*.

\* Nevertheless, besides my friend mentioned above, I have met with several A. B. F. C. D., whose acquaintance with Latin was, in more than one sense, *Hibernian*. One of the medical officers of the regiment in which I last served, sported the distinction, but on many occasions his classical accuracy and attainments were questioned. Indeed, whenever he meddled with Latin, in history, whether ancient or modern, we used to prick up our ears, and, times without number, had an opportunity of criticising him effectually. The *cut and dry* answer uniformly was, "I can't be wrong: sure I have a *right* to know.—Was not I *obliged* to learn all that sort of thing ere I tuck my degrees at Trin'ty College, Dublin?" We, Englishmen, however, make a distinction between *rights* and *obligations*, which Irish *scholars* do not bear in mind.

Upon one occasion, this A. B. came to dine with a brother officer and myself; when he looked into a volume of the *Spectator*, and, after chuckling to himself for some time, with much apparent complacency, if not exultation, he declared he had found an error in *Juvenal*. "An error in *Juvenal*!" said our entertainer, who was himself a Dublin graduate. "An error in *Juvenal*," said I, "left, till now, for you to find out!" "To be sure—and Master

Mr. K\* (as well as myself) had no desire to have his nose brought to the grindstone, so we resolved to give each other an amicable brush up. It being the fine season of the year, we studied the confirmation *mentis sanæ in corpore sano*, by taking advantage of the summer evenings to walk into the country, interrogating and answering by turns. After a few Latin experiments, however, of this sort, I was obliged to declare to my associate, that he would infallibly be plucked, on account of his Latinity, which, with all due respect, I must say, was, to me even, shocking. "Pluck me," he rejoined, "for my Latin! if they do, I shall demand the production of any book they please, and allow them to throw it open *ad aperturam liberi*, and I'll challenge them all to translate and construe." "I have no doubt, my dear K\*, of the result; but, if you please, we will, for the future, go on in plain English." "Very well; English or Latin, it is all the same to me, provided we forward the business."

Addison didn't find it out, as you shall see." He then read a motto to one of the papers, taken from *Juvenal*;

"*Amicus jucundus, in via, cum vehiculus est.*"

"Well," said I, "there can be no error there." "Isn't there?—is that all you recollect of your grammar? Sure haven't I a *right* to know that *cum* is a preposition governing the ablative, and Mr. *Juvenal* has placed it before the *nominative*!" There could be no doubt of the fact; but my reply was to the following purport:—"Then, if translated into English, according to your idea, it should import, that there is a pleasant friend going along the road in a carriage." "Exactly," says ABC, "if it were correct." "But," rejoined I, "the obvious meaning is, that a pleasant companion on the road is like a carriage, or an easy and agreeable mode of conveyance; recollect, that carriages were not, in those days, much used for short, or even long, journeys." "I don't know that." "Nor I, for I never travelled then; at the same time, *cum* is also an adverb, signifying *as*, or *like to*, or *the same as*; so that we may translate the passage as I have already attempted to do, without much risk of making nonsense of the quotation."

Some amusing anecdotes of this same gentleman are to be found in "The English Army at Waterloo, and in France," a work recently published, and written by an officer of the Medical Department.

After this new compact had been observed for a short time, we were summoned to attend the authorities upon certain days. K\*'s turn came before mine, and ere I went up, I had the agreeable intelligence revealed to me, that my grinder (*pour m'encourager*) was remanded till next summer. However, I felt the less alarm upon the occasion, because I had foreseen the all but inevitable occurrence of this catastrophe. K\* was obstinate, and persisted in d—g the dead language. When my order reached me, I signified my intention to take a more systematic, though shorter review of my studies, by myself, and to do this in a way of my own.

The house of Dr. Duncan, senior, was appointed to be the theatre of my good or bad fortune; the day I forget (somewhere, I think, about the middle of July),—the hour eleven in the forenoon. The first examination (of five) is conducted in this manner, with a view to give the candidate the benefit of being collected, and, in case of rejection, keeping his own secret. Two culprits are tried *per diem*, while the Court sits; one (*quasi ego*) in the morning, and the other in the evening, and in the same fashion. I did not let a single individual know what I had before me, beyond the general fact, that I intended to be *doctored*, either in the course of that year or some other; but of time or season none but the Faculty and myself had any knowledge.

About nine in the morning I had to preside over a numerous party at the breakfast table of the excellent friend of whose house I was an inmate; he and his lady being in the country. I sported unusual spirits, though I could neither eat nor drink. My Sunday clothes (for it was *etiquette* to appear in them upon such occasions) I had, a day or two before, secretly despatched to the residence of one of my companions, and thither I repaired to put them on, in order to mystify, as much as possible, the youngsters among whom I was domiciliated.

It was a nervous time of day at which to pay a visit of this nature in Adam's Square, a situation laid completely open to the view of every passenger, in one of the most frequented thoroughfares of Auld Reekie; close, also, under the shadow of the College, and completely exposed to the ken of the students. These, of course, were a most formidable corps of observation; for if they saw a *confrere* sneaking into the doctor's dwelling, they could not possibly mistake the purpose, and thus the secret might get wind. For my own part, I believe I had reason to hug myself upon my luck; for what with choosing by-streets, and keeping my eyes upon the ground\*, maintaining a quick step and assumed indifference, I got housed without seeing any body of my acquaintance, however many might have seen me.

Being a little before my time, the worthy and amiable master of the house invited me into his study, and held a few minutes' conversation with me, terminating it in these words:—“Mr. —, I do not know what the Professors belonging to the Faculty will examine you upon; but, as master of the house, it will be my duty to begin. In order, therefore, that you may acquire self-possession as you proceed, I will tell you, in strict confidence, the course I intend to take. I shall question you upon the structure, functions, and diseases of the urinary organs; as also concerning the chemical composition of the urine itself; afterwards, you will be handed over to each of the other Professors in turn, and they will deal with you as they find occasion. In the mean time, as I must be in the way to receive them up stairs, you will do well to refresh your recollection by looking over a part of this book, which treats

\* It is said, more fancifully, perhaps, than truly, that when the woodcock considers himself in danger, he runs into some secluded corner, where he pushes his long bill into the ground, and turning his back upon the apprehended peril, considers himself safe; for, inasmuch as he sees nothing, while thus fixed, he foolishly *imagines* (?) that no foe sees him!

of the subject ;" laying before me a work written in Latin by some German author, with whose name I had not presence of mind sufficient to make myself permanently acquainted.

I felt, at the time, and have ever since felt grateful for the urbane humanity with which the venerable gentleman treated me on this occasion. It was quite characteristic of one who died an *ultra octogenarian*, in a green old age, and universally respected.

The particulars of my first, second, third, fourth, and fifth examinations I cannot inflict upon the patient reader till next opportunity ; but they will gratify some curiosity.

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OPERATION OF THE ANATOMICAL BILL.—DEFICIENT SUPPLY OF SUBJECTS AT THE MEDICAL SCHOOL, GUY'S HOSPITAL.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

I WAS rather surprised to see a statement in your very useful Journal of this week, importing, that "since the Right Honourable the Secretary of State for the Home Department *had enforced* the new law impartially, that the study of medicine," or I would rather say the study of anatomy, had been wonderfully accelerated, and that the number of bodies, which had been supplied to all the London schools, had averaged thirty a-month, and had now increased to the (I must say) astonishing number of one hundred and sixty. I would beg to ask of you, or through your Journal, by what means these bodies have been disposed of, or to what schools they have been given, as I can assert, and without fear of contradiction, that, at Guy's Hospital, an institution equaling, and, I may say, exceeding most others in its wealth and resources, there has not been more than thirty subjects during this session. Numerous pupils, myself among the number, have been waiting anxiously to commence, and have not yet been able from the great scarcity of subjects. I would inquire, Gentlemen, how this

happens? Is it that our teachers do not exert themselves in our behalf, as the heads of other schools do, or that we are not thought of, by Dr. Somerville and the Secretary of State, as one of the London Schools? One word more about the expense to pupils and the charge for subjects. The price which has been paid, during the season, is four guineas, and never less ; for an extremity eleven shillings, and, if injected, thirteen shillings ; so that on this head, also, you must have been misinformed. Of the price we do not complain, but of the scarcity.

An insertion of the above will oblige a subscriber to your very useful *Hebdomadary*, and also

A PUPIL OF GUY'S HOSPITAL.

Saturday, Jan. 12, 1833.

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POLITICAL MEDICAL APPOINTMENTS IN DUBLIN.

A VALUED correspondent has furnished us with an account of some recent medical appointments in Dublin, at which the faculty at the other side of the channel must laugh. Two gentlemen are appointed to situations over the heads of many much better qualified :—

"Both appointments were purely political—that of Sir Arthur Clarke, by the Ladies Morgan and Cloncurry, that of Dr. Byrne, through the instrumentality of the Solicitor-General, and we have ascertained that the Surgeon-General took no part whatever in inducing the nomination, which was referred to him *after* it had been made, and in the ordinary way of business. Since our last, another change has taken place in the appointment. The College of Surgeons having resolved to remonstrate upon the nomination to the Lock Hospital, which it appeared had been made contrary to law. Sir Arthur Clarke was removed from thence, and Dr. Byrne appointed at a reduced salary. The situation of Surgeon to the Police and Watch, hitherto held by one individual, is divided between Sir Arthur and Dr. Ireland."

THE

## London Medical &amp; Surgical Journal.

Saturday, January 19, 1833.

## MEDICAL REFORM.

“ I think I hear a little bird, who sings  
The people by and by will be the stronger.”  
BYRON.

THE time has at length arrived, when monopoly in medical affairs will be no longer tolerated. The only supporter of medical abuses, our able and consistent contemporary of the *Gazette*, has suddenly turned round, and vociferously demands reform in the Royal College of Physicians. A few short weeks ago, the medical corporations of this country were, according to that independent writer, super-excellent; they formed one great university, the celebrated school of Hyde Park Corner included; they were consummate perfection. But lo! that college, before which its creature had been “ bowing, and bowing, and bowing,” now needs a complete change in its illegal by-laws and its miserable policy. When we perused the article to which we refer, we closed the book, looked at its cover, as we could not suppose it to be the dull, crouching, mean-spirited production it was wont to be, when we really recognised it as the *chef d'œuvre* of medical placemen and corruptionists. We were utterly unable to probe the motives which led to the abandonment of its usual principles; but, on a little reflection, we recollected, that a few weeks since, we emphatically declared, that a Committee of the new House of Commons

would be granted early in the session to examine into the state of the Colleges of Physicians and Surgeons in London, and consequently, that the illegal usurpations, the tyranny and injustice of these bodies, would be exposed to the country, and would of course be annihilated. Our contemporary and his employers discovered the woful truth of our statement, and, accordingly, the College commenced deliberations for reform, and their champion suddenly sees a thousand deformities in their institution, and therefore he implores, expostulates, and threatens (may Jupiter Ammon protect our friends in Pall Mall East) that all insulting by-laws must be instantly repealed—that the fellowships must be thrown open—that monopoly must cease. He tells us, that some important changes are contemplated, “ by which much that is objectionable and invidious in the present system would be obviated.” How liberal of the College—how just—how equitable—how condescending! Whence the cause of all this? Hear the reason:—“ The College, unless saved by some speedy change, must fall into decay; the temper of the times has deprived it of its powers—always rather doubtful (O! Apollo and Esculapius) as a controlling body; while, morally, its influence is waning with the increase of intelligence, which leads the public to judge of men rather by their solid acquirements than by their chartered prerogatives.” The writer goes on to declare, that no half measures will do, as the time is at hand “ when the

fellows will have to assay, what ancient usage and musty parchments, and royal letters (we marvel he did not add bulletins), can do against common sense, general opinion, and the public press." Bravissimo, trumpeter of the corruptionists; the Reform Bill has done wonders. We are subsequently informed of the "tottering fabric which may, perchance, be levelled with the ground by a reformed Parliament." We imagine that we hear the fellows with one voice exclaiming, "vivi pervenimus; farewell, a long farewell, to all our greatness; we shall no longer sit in scarlet robes and insult physicians infinitely superior to us in age, in learning, acquirements, and experience, by subjecting them to school-boy examinations. We can no longer insult Edinburgh graduates by our Oxonians and Cantabs wearing dingy, old stuff gowns at the examinations, of which we considered the modern Athenians unworthy; nor shall our illustrious President, with dignity and gracious smiles, extend his august arms to receive the licensed on bended knees, on velvet cushion, into the hall of our *sanctum sanctorum*, for into our scanty, half-filled library, or empty museum, they cannot enter after the degradation which we, in our profound wisdom, subject them to, without our special invitation, notwithstanding our mulct of fifty-seven pounds from each. But, alas! they, the *minus docti*, our *permissi*, the *alieni homines*, are on the eve of destroying our venerable privileges. So mischievous is the

spirit of the times, that accursed march of intellect and Whiggish Reform Bill, which no longer tolerate that happy state of things transmitted to us by our revered predecessors, and justly granted to them by that wisest of all kings, Harry VIII, of pious memory." Such are the secret lamentations of the College of Physicians at this moment, and such is the insensibility of the age, that these are unheeded. We rejoice at it, and we ardently hope, that every corrupt and antiquated institution in this country will feel the salutary influence of the reformed parliament. To abandon irony, let us view the conduct of the College in its true light. Let us premise, that we belong to this body, because the law of the country requires our doing so. For many of the fellows we entertain respect; for the whole, as an official body, the most sovereign contempt. Every man of a properly constituted mind agrees with us. Because every one, conversant with the laws relating to the College, must admit, that the managers of that body have openly violated the law of the land, while they neglected the interests of science and of the public. They divided the members into fellows and licentiates; they examined, and still examine, graduates of Oxford and Cambridge, contrary to their charter and one of the statutes of Henry VIII.; they persecuted regular graduates, incarcerated them with felons, while they suffered villanous quacks to practise with impunity. They dare not attempt such tyranny at present; but they insult those who are admitted as



licentiates, or rather fellows, according to Mr. Willcock, and have the audacity to shut the collegiate portals against them, until opened by their own gracious invitation. They rejected Mason Good and Armstrong, men whose names will shine in the annals of medicine, when those of their contemptible insulters will be forgotten. They despised the claims of moral justice, they placed beardless youths, from Oxford and Cambridge, above a Good and an Armstrong, above the most learned, experienced, and eminent of the licentiates, as if common sense and public opinion were to be opposed by such despicable injustice. It would be invidious to institute a comparison between the fellows and the members of the present period; but we maintain, that the latter have done infinitely more in support of the medical literature of the country. What have the present fellows done as authors? Is there even one of them who has produced an original work of mediocrity? But they were educated at Oxford and Cambridge, in which there are the most defective medical schools, such as are far inferior to any private school in London. The London and the other Colleges imitate that oligarchy mentioned by Aristotle, whose oath was, "we will do the multitude all the evil in our power." We are determined to depreciate the great body of physicians in this kingdom, and thereby diminish their numbers; we shall allow the apothecaries to examine in physic, and give attractive licenses to their members to practise medicine; while we,

about sixty in number, are more than sufficient for Modern Babylon, and, by keeping court and public appointments among ourselves, by earwigging royalty and nobility, we shall have all the pensions and places of worth, and let the licentiates subsist upon the stupidity of the profane vulgar.

Such is a faint view of the profession of physic at present in this country, and if any well informed medical practitioner, or any man of an enlightened mind, except a Fellow, can be found to advocate it, we pity him. In making these remarks, we are not influenced by acrimony of feeling, nor do we wish to employ asperity in reproof, nor harshness of expression, nor invective. We expose assumed privileges and usurpation of government. We assert the truth, and we maintain it by argument and fact. Our honest endeavour is to expose corruption and abuse, with the expectation of having these corrected. The time has arrived when old-fashioned monopolies can no longer exist; when those of the same calling must enjoy equal rights and privileges.

We sincerely and anxiously wish that the College may have the good sense to avoid destruction; and this it can only do by an immediate reform. Let it make a virtue of necessity, and forthwith abolish its illegal by-laws. Let all its members have equal rights; and nothing, but the lapse of a few short weeks, can prevent them. Court intrigue and government influence can no longer be opposed to public opinion; for never was there a time

when the truth of the maxim of an inspired writer was better illustrated: *Vox populi, vox Dei*. We tell the College, that half measures will not do; that it is useless to throw out "a tub to catch the whale;" and that when once a parliamentary committee is appointed, of which there is not a shadow of doubt, an efficient medical reform will be effected.

There is a rumour abroad, that the College is endeavouring to obtain power to confer degrees in medicine. This is absolute folly. *Quem Deus vult perdere, prius dementat*. It would be the height of absurdity, to imagine that the Censors of the College, one or two of whom are generally under the age of thirty, and not known a mile from their respective residences, and the other two octogenarians, would be qualified to examine in the different branches of medical education. What pretensions could they have to examine in descriptive or general anatomy, chemistry, midwifery, or surgery? If degrees are to be given in London, and they should be, the Professors of the London University are, most unquestionably, the best qualified to grant them. Here are Professors in all the medical departments, selected from the whole profession, on account of superior attainments in their respective branches, and therefore these, and these only, ought to be empowered to grant degrees. We are quite certain, that in the event of the College applying for such power, the whole physicians of England, with the exception of the Fellows, will unanimously petition

Parliament against the measure. If further proof were demanded, as to the insufficiency of this body, we need only refer to its stupidity in declaring cholera contagious! Had its members at large a voice on the subject, such a decision would not have been made; quarantine would not have been enforced; the humbug of the Central Board would not have been suffered; the medical profession of England would not be the laughing-stock of Europe and of the world, for believing a disease contagious, which every experienced member of the profession denies. In saying this, we wish to be understood correctly;—the decisions of the Boards of Health were published as those of the whole profession; while, in truth, 99 in 100 of the Faculty amongst us were non-contagionists.

Let the College act liberally and wisely, and it will be revered by its members at large. Its library and museum will be enriched; donations will be left to it; and it will become the first medical institution in the world. Such is our anxious wish and ardent desire. Whatever reform will be made in it, will extend to its rivals elsewhere; and medical science and public health will be incalculably benefited.

In our next we shall pay our respects to the College of Surgeons.

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#### ROYAL COLLEGE OF SURGEONS IN IRELAND.

At the annual election of officers for the ensuing year, there was an unusually large attendance of the mem-

bers of the College, no less than sixty-five having been at one time in the room. The ballot terminated as follows:—

President, James Kerin;—Vice-President, John Kirby.

*Court of Censors.*—Samuel Wilmot, Francis White, Arthur Jacob, W. H. Porter, Maurice Colles, and Robert Adams.

*Court of Assistants.*—Abraham Colles, Rawdon Macnamara, Alexander Reid, J. W. Cusack, William Corbett, William Teggart, R. Harrison, E. M'Dowel, T. Rumley, John Harte, W. Palmer, and C. Benson.

*Midwifery Court.*—Chairman, —Sheckleton; Deputy-Chairman, S. Hulahan; Members, Charles Peebles, Luke Whitstone, —Armstrong, S. Cusack, —Beatty, and —Maunsell.

It would be well if the London College of Surgeons took a hint from its Hibernian contemporary, and added a Midwifery Board to its Court of Examiners. Why not have some competent examiners in midwifery as well as the Dublin College, or the London Apothecaries' Hall? The answer is, because our brethren at Lincoln's-Inn Fields are gentlemen of the old school, who are combined, like certain manufacturers, to produce as many surgeons as possible, and thereby to fill their own pockets; but, as to the knowledge of the new followers of Machaon and Podalirius, they may be as ignorant of practical medicine, *materia medica*, and obstetrics, as Bedlamites. We have known persons pass the College who had no knowledge whatever of internal or medical diseases; who could not distinguish between inflammation of the lung and inflammation of the liver; who would not know Epsom salts from oxalic acid; who could not state the dose of jalap, calomel, opium, &c. &c.; yet such are the attainments of surgeons who are deemed qualified to practise in fevers and internal inflammations, or rather as physicians, by the renowned examiners, Sir Astley Cooper, Sir Anthony Carlisle, Mr. Lynn, Mr.

White, Mr. Guthrie, Mr. Vincent, and others.

In making these remarks, some of our readers will think us hypercritical; but to such we reply, let the College of Surgeons keep pace with the times. Let it not be supposed that an enlightened profession is to be led by this body any longer. Men think for themselves at present, and no medical practitioner, of properly enlightened mind, will bow down to a band of monopolists, of self-interested and self-elected men, whose idol is sordid lucre. We ask, could anything be more absurd than the College requiring attendance on midwifery lectures, while the President was blackguarding obstetricians in the newspapers, and at the same time gravely proposing that, in all difficult cases, hospital surgeons should be called in—persons who could not distinguish the infant's head from its —, a proposal that was universally ridiculed by the profession as well as by the public; because the Examiners must not practise obstetrics or pharmacy, and consequently could not, with any semblance of consistency, examine on these branches.

In our succeeding Numbers we shall expose the tortuous policy of every medical corporation in the United Kingdom, and demonstrate to the public press the necessity of taking up the subject.

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#### CURIOUS PROPOSAL FOR PERPETUATING THE MEMORY OF THE DEAD.

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M. BARREUL, principal chemist to the Paris Faculty of Medicine, thinks that, according to the examinations of the blood which he has made, he could extract as much iron from the blood, after death, as might be made into a medal of the size of a forty franc piece of gold. With appropriate inscriptions, such medals would be considered, by families, as the most precious relics of departed relatives.

## Reviews.

*The Dublin Journal of Medical and Chemical Science. No. VI. Vol. II. January, 1833.*

(Continued from p. 761.)

THE paper which now claims attention is headed, "Notes on Malignant Cholera, as it appeared in Dublin. By Simon M'Coy, one of the Resident Medical Officers of the Grange Gorman lane Cholera Hospital." The author resided in the hospital from April until August. The establishment accommodated 700 patients, and generally contained 500. It was one of the chief government hospitals, was placed under the superintendance of the Board of Health; and hence the origin of a positive order, that no necrotomic examination should be instituted!! Mr. M'Coy deeply regrets this, and expresses his inability to comprehend the utility of prevention. He writes with candour and impartiality. His description of the symptoms of cholera is excellent, and his remarks on the question of contagion are so unprejudiced, as to carry conviction to the mind of any rational person, that cholera was not contagious. We allow him to tell his own story:—

"Doubts have been raised that the cholera in this country is identical with the true Indian cholera; the point may not be of much importance, but I have conversed with many army surgeons who served in India, and saw much of the disease; all declared in the hospital that the cholera before them was that of India, scarcely modified by the difference of latitude of the countries or habits of the inhabitants. That the disease is new among us, I would almost take upon myself to affirm; many years' attendance on the poor of this city at their own dwellings would, in all probability, have brought me in contact with it, if it did really exist. I have never until this year seen any thing

like it. The question, whether the disease is communicable from one person to another, mediately or immediately, and whether other matter than the human body be capable of retaining for a period, and then disseminating it, is one of the greatest importance, in many points of view; and accordingly it has been frequently raised by medical men, and those not of the profession, and discussed by either with almost a rancorous pertinacity. I will not presume to act the syncratiser in the conflict of opinion, but I know these facts as bearing on it. Of 200 or 300 servants attached to Grange Gorman Hospital, including nurses and ward-maids, a much less proportion of them have, I think, been attacked with cholera than of a similar description of persons out of doors. I have not known one of those persons employed to carry the sick from the gate to the wards, or those who carried the dead from the wards to the dead-house, or those engaged in burying the dead, or those who collected the clothes of the patients as they arrived, to deposit them in a place provided for their reception, or those of the establishment who conveyed the sick from their dwellings to the hospital, attacked with cholera, although some of them were for months so employed, endured great fatigue, and were far from denying themselves the indulgence of spirituous liquors when they could get it. In every bad case I always appointed a ward-maid to attend exclusively to it, to prevent any chance of mistake or neglect in the exhibition of the medicines ordered, or the regular performance of other offices no less essential. On coming unexpectedly into the wards in the middle of the night, I have often found these persons stretched on the same bed with a collapsed patient, sometimes asleep; yet I have not known any ill consequences to follow. The frictions performed by these females obliged them sometimes to inhale the pestiferous exhalations (if such there be) from the bodies of the patients, yet

the instances of their being attacked with true cholera were very rare indeed. Those excellent ladies, the "Sisters of Charity," whose exertions in practical works of mercy were unceasing, who inhaled for hours the very breath of the dying, have not, in a single instance, to my knowledge, sustained injury. The Protestant clergyman, who prayed in the wards, and the Catholic clergyman, the nature of whose duties obliged him to sit by the bed-side, with his face often in actual contact with that of the patient, sustained no injury. None of the medical officers took cholera. I have tasted the rice vomit and escaped. Several women were brought in, in very bad cholera, with children at their breasts, endeavouring to draw sustenance from this maternal source. Some of the mothers have died, but the children have not been attacked; others who recovered have refused to let the infants be taken from them during their illness, and no ill effects followed. Some females were delivered in the hospital at different periods of utero-gestation, and out of the number two, I think, of the children survived; one of these, however, took the disease in three weeks after, and died in a few hours. The suddenness with which the number of patients seeking admission increased or diminished was very remarkable; on four successive days, for instance, we had 285 admissions, and on the four next following we had 497; and in a fortnight afterwards, the numbers on four successive days were but 134. On one night, from midnight till seven o'clock in the morning, we had but two admissions, and but one week previously, patients were coming in at the rate of 40 or 50 in the same period of time. How may this be accounted for? On the other hand, I have been informed, that amongst the visitors allowed into the wards to see their friends, two took cholera in one week, and, I believe, died. A woman, accompanying the cot which conveyed her son to the hospital, took ill at the gate, although previously

apparently in good health, and was the most rapidly fatal case of cholera I witnessed. It was no unusual occurrence to have two, three, or four members of the same family in the hospital together in cholera. Certain streets in Dublin sent in fifty patients, I think, to one sent from other streets in all appearance equally calculated to produce disease. One of my pupils, who had occasion to come to me to the hospital almost daily, was obliged, after a time, to discontinue his visits, from observing that his bowels became unpleasantly affected every time he came there. Neither the history of the disease, which I have read with some care, nor the facts which came under my own observation, have served to convince my mind on the contagion question; perhaps the fault is in the mind. I should rather be inclined to consider cholera neither contagious nor infectious.

"Writers have distinguished certain stages in the progression of the symptoms of this disease; if this is merely for the convenience of description, there may be little objection to it, but if it is intended to mark a regular succession of symptoms, by witnessing any of which, one would be enabled to say to what extent the malady had gone, and thereon to found a prognosis, or a mode of treatment, I can only say I have not found it very useful in practice. I have observed the greatest irregularity in the *succession* of the symptoms, in their *duration* and *severity*. I have seen any one symptom take precedence; I have known any one of its symptoms occasionally absent; I have seen all the symptoms strike at once. I have seen the disease linger with trifling symptoms for a week before there was much cause for serious apprehension; I have seen it run its course from apparently perfect health to dissolution in one hour and three quarters; I have seen them present every shade of severity, from the most tranquil state to one of great agony. There was one circumstance

remarkable on this subject, that the prevalence of particular symptoms appeared periodically endemial; for three or four successive days the great majority of patients received into hospital would have one symptom or train of symptoms predominating, the next period others, and so on; sometimes most of them on their arrival complained much of cramps, and of nothing else; at other times they were almost all vomiting. Again, febrile symptoms of the asthenic type would present themselves, which in a longer or shorter time merged into regular cholera; at another time they came with flushed countenance, and tumid and very tender abdomen; at another time, cold, pale, and almost lifeless, &c., &c. I was not able to connect these with any remarkable atmospheric changes. I think most of the worst cases I have had were during the prevalence of drizzly minute rain; the air much charged with electricity appeared to me obnoxious to the disease. It was observed, that after a day or two of rain, the number of cases increased; but this might have depended on causes unconnected with the malady itself. Until the beginning of June, I hardly saw an individual under fifteen or sixteen years of age affected, and had almost concluded that young persons were nearly exempt from such infliction; but in July, the number of children under my own care was, to adults, as one to thirteen or fourteen. I saw one instance of pure cholera in an infant three weeks old."

With respect to predisposition, he states, that more than one-third had no indisposition previous to the invasion of cholera; but, in general, the remaining portion had had disorder in the bowels, or diarrhœa. Another of his observations deserves great attention:—"There does not appear to be any period of life totally exempt from cholera: but the extremes of youth and old age are least subject. I have had few patients above sixty-five. From eighteen to forty-five is the general range of the ages of those

I attended." Mr. M'Coy gives a most minute account of the symptoms and progress of cholera, which we need not place before our readers; and he reserves the treatment until the appearance of the next number of our contemporary. He mentions an awful case in which a female was destroyed in *an hour and three quarters* from the time of invasion of the disease; and she assured him, that she suffered from no indisposition preceding the moment of attack. This is the most sudden instance of fatality we have ever heard of. The author of this paper deserves great credit for the manner in which it is executed. We have no doubt but his labours will be referred to by succeeding writers.

The next paper is entitled "A New Mode of making an Early Diagnosis of Aneurism of the Abdominal Aorta." By J. Corrigan, M.D., &c. The mode proposed by Dr. Corrigan is the application of the stethoscope, the patient being placed in the horizontal posture, when the "*bruit de soufflet*," or bellows sound, will be distinctly heard. Two cases are related, in which an accurate diagnosis was made by auscultation; and a variety of pathological observations are appended, which prove the writer to be an able pathologist, and an excellent practical physician, and a gentleman deeply versed in medical literature.

The last paper is on "Irritative Erythema." By Robert Law, M.D., &c. The author relates some cases in which erythema, succeeded by bullæ, were observed, and which, we think with him, most persons would designate pemphigus gangrenosus. These were accompanied by great constitutional disturbance, such as is excited by dissection, wounds, or diffuse inflammation of the cellular substance. This paper is well written, and contains the opinions of the best essayists on the subject to which it relates.

We think our readers will agree with us in opinion, that the original communications in our Dublin contemporary are of great practical value.

and second to none in any periodical published in Great Britain. We congratulate our Dublin brethren on the success and value of their periodical, and their breaking through that silence which so long and so unaccountably characterized them. They have now clearly shown the profession, at this side of the Irish Channel, that medical science has progressed as rapidly among them as elsewhere.

#### DISCOVERY OF THE LAMINATED STRUCTURE OF THE BRAIN.

WE referred last week to M. Leuret's discovery relative to the structure of the brain, and we now subjoin a copy of that gentleman's letter upon the subject to the President of the Academy of Sciences in Paris:—

“At the last meeting of the Academy, when I announced my discovery of the laminated structure of the brain, my priority of claim on the subject was placed in doubt by M. Serres, who stated that this structure was already known. When the meeting broke up, I requested M. Serres to give me some information on the subject, when this gentleman informed me that he had discovered and described it; that he had anatomical preparations and drawings demonstrating it; and, as he had been named one of the commission to decide upon my work, he proposed that we should previously meet, in order to show what each of us had discovered. I very gladly agreed to this proposal; and, yesterday, the 30th of December, we proceeded to compare our preparations and drawings, in the presence of M M. Geoffroy-Saint-Hillaire, Esquirol, Bourdois de Lamotte, Villermé, Louis, Mitčvié, and some others. The following is, *sauf erreur*, the result of our investigations.

“According to M. Serres, the hemispheres of the brain are formed of two orders of laminæ: the one, arising from the *crura cerebri*, being ranged in such a direction that a

probe, passed laterally through one of the hemispheres, may be supposed to pass between two laminæ, without a single one of which the hemisphere is composed being pierced; while the instrument, passed longitudinally, must penetrate the whole. These laminæ, which M. Serres calls *radiated*, are not all of equal height; for some extend so as to correspond to the projecting convolutions, while others only reach to the bottom of the *sulci*.

“M. Serres terms a second order of laminæ *undulated*:—these being placed on the periphery of the brain, form a sort of body over the former. To give an idea of this, I may be allowed to have recourse to the comparison of a piece of linen cloth placed over a shrub, the branches of which, being of unequal extent, would form a general surface of elevations and depressions; the projections corresponding to the longest branches, as, in the structure which M. Serres supposes, the longest radiated laminæ correspond to the convolutions; while the depressions formed by the short branches resemble the short radiated laminæ ending at the bottom of the sulci.

“Now if, instead of a substance resembling fine linen cloth, we cover the edges of the radiated laminæ with a coating of a white substance, having a thickness of some lines, and upon this again superpose merely a coating of a gray substance, not continuous with the former, we can form an idea of the structure of the hemispheres as described by M. Serres.

“But this is not the structure which I have undertaken to demonstrate. In my preparations, which, unlike those of M. Serres, exhibit things clearly, the convolutions are made up of an infinity of small laminæ in close contact, formed of white substance passing continuously into the gray, *qui leur fournit comme une foliation*: so that the surface of the brain may be compared to the leaves of a book united at their very edges by a thin coating of gum.

“There is here a complete difference between M. Serres' ideas and mine. Genneri, an Italian author, is the only person, as far as I am aware of, who seems to have had any idea of the laminated structure of the convolutions. Gall and Spurzheim only notice a central division, and consequently two laminæ; and there are, as I have stated, many laminæ and many divisions.

“In the interior of the hemispheres the substance of the brain is shown by M. Serres' preparations, as well as by mine, to be composed of laminæ; but, contrary to that gentleman's ideas, these laminæ are continued into the convolutions; they are not arranged one before another; and a probe passed laterally through a hemisphere must necessarily pass through the centre of numbers of them.

“I also presented to M. Serres, and the gentlemen above-mentioned, preparations illustrating the structure of the *corpus colosum*, the *crura cerebri*, and the *cerebellum*; but, as he shewed nothing relating to these parts, I shall not here refer to them.

“To sum up the whole, in reference to the claim of priority, set up by M. Serres, it appears to me.

“1. That, as far as regards the cerebral convolutions, no question exists, inasmuch as I have arrived at conclusions very different from those of M. Serres.

“2. Relative to the white substance forming the interior of the hemispheres, M. Serres declares, as I do, the structure to be laminated; but I do not admit that the laminæ are arranged and developed generally according to that gentleman's views.

“I will add that, in commencing my researches, I could not have profited by the drawings or preparations of M. Serres, nor of his mode of proceeding, as nothing had then been published by this gentleman on the subject.

“I have the honour to be, &c.

“LEURET.”

“31st Dec. 1832.

#### ST. GEORGE'S HOSPITAL MEDICAL AND SURGICAL SOCIETY.

ON Thursday, January the 3d, the subject of erysipelas was resumed by Mr. Smith, and the different methods of treatment, employed in this complaint, were fully discussed by the Society.

On Thursday, January the 10th, Dr. Aldis read a paper on the use of iodine. Among other diseases, its utility in some cases of dropsy, depending on enlarged liver, was alluded to. A case of dropsy was related, which had occurred in the Hospital, wherein considerable benefit was derived from the rubbing in the hydriodate of potass. Dr. Bardsley's and Dr. Kolke's cases of dropsical effusion, treated by iodine, were mentioned. The latter we have given in the first Number of this Journal.

#### NECROLOGY.

DIED ON the 10th instant, Joshua Brookes, Esq., F.R.S. F.L.S., Sec. Cas. Nat. Cur. Mosq. Soc., &c. &c. He taught anatomy for forty years in Blenheim-street, during which time he educated upwards of 7000 students. He arranged a museum of anatomical and zoological specimens, which, for number, beauty, and interest, were unequalled, except by his predecessor, the illustrious Hunter. It is a disgraceful fact, that the Royal College of Surgeons excluded this celebrated anatomist from its council and examiners; and the only reason which can be assigned for this studied insult was, that Mr. Brookes was not a hospital surgeon, and that he, with Mr. Carpue, derided the shallow pretensions of men who were most unjustly placed above them.

#### BOOK.

A further Examination of the Principles of the Treatment of Gout and Rheumatism, with Observations on the Use and Abuse of Colchicum. By Sir CHARLES SCUDAMORE, M.D. F.R.S. Second edition, considerably altered and enlarged. 8vo. pp. 127. London, 1833. Longman and Co.

#### NOTICES TO CORRESPONDENTS.

Several unpaid communications have been refused. It is astonishing, that persons writing on their own affairs, have the modesty to put



us to the expense of postage. After this date, no letter or communication will be received by us unless forwarded free of expense.

*Dr. Syntax.*—We are not responsible for the style of the lectures published in this Journal.

*A Bartholomew Pupil.*—The attack on the lecturer is unjust and undeserved.

*Classicus.*—We cannot answer the question, but we scarcely think it possible that the Latin Examiner of Candidates at the Hall is a classical teacher.

*Zacchias.*—We decline the article on the Inquest at Clerkenwell. The strictures on the evidence are too severe. Both the surgeon and the dentist were blameless, though the witnesses, in our opinion, were not justified in stating that the extraction of the tooth was not the exciting cause of inflammation of the jaw, subsequent gangrene, and whatever disease appeared in the brain. Would the man have died if the tooth had not been extracted? The evidence published in the leading morning papers does not warrant a conclusion in the affirmative. We firmly believe that there was no severe injury done the jaw by the dentist, whoever he was, and also that the treatment employed by the surgeon was judicious; in fact, that both are blameless, as the fatal result might have followed no matter who was the operator; and therefore the law would hold both harmless; but we cannot agree to the opinion of the medical witnesses, some of whom we know, and all of whom we respect, that the extraction of the tooth was not the exciting cause of the subsequent mischief which destroyed the deceased. We may be in error, but such is our opinion.

*Naval Officer.*—A physician or surgeon in practice as such, and not as an apothecary, before 1815, cannot escape the worshipful Company. There was an act passed in 1825, which continued in force *one year only*, which exempted such practitioners from the Apothecaries' Act, and that law is, of course, a dead letter at present.

*Dr. Montgomery's* favour has been duly received, for which we offer him our sincere thanks. A certain gentleman should have called upon him in October, to whom we write this day for his negligence.

*Professor Graves's* communication will, of course, receive that attention which is due to it.

*Justus.*—In pity we withhold the letter; its author ought to study Murray's, Cobbett's, or Pinnock's Grammars.

If the Chemists have not an abler defender than a person who indites "through," for "true," they are sadly off indeed. We say to this writer "ne sutor ultra crepidem."

*Mr. Pearse.*—We are much obliged by the list of Subscribers at Westminster, and shall publish it in our next.

*A Subscriber.*—We shall consider the matter. We are not singular in the respect mentioned.

Damages and Costs against Dr. Ryan for defending the honour and dignity of the Medical Profession nearly £800.

We owe it to our numerous correspondents to state, in reply to several communications, that Dr. Ryan feels as much complimented by the subscription of a shilling, or a half crown, as by the largest amount. He is well aware of the low state of the profession, which he deplures, but he is proud that there are medical practitioners, on whom fortune frowns, who are alive to the character and honour of the profession. It will be said, why have not the heads (we should like to know who these are) of the profession supported the respectability of the faculty on this occasion? We answer, because the heads have been faithfully depicted in this periodical, and because one of them, a dupe to an opponent, allowed his reason to be stultified by a —, and he, most virtuous, upright, and christian brother, influenced the powers that be, though in his and their defence, our colleague committed himself, and very foolishly ridiculed the impertinent falsehood that Long was as able a practitioner as any member of the faculty. As a proof of his ability, he has lately published that an *alcohol* and a *virus*, which he of course can extract, are causes of all diseases.

Amount of Subscriptions already received, in aid of Dr. Ryan . . . £176 2 0

The following subscriptions have been received since our last:—

	£	s.	d.
K. W. . . . .	2	2	0
G. M. B. . . . .	1	1	0
George Taylor, Esq. . . . .	0	10	0
Liberalis, Halsted, Essex . . . . .	0	2	0
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ALL Communications and Books for Review to be forwarded (free of expense) to Dr. Ryan, 61, Hatton-garden, or to the Publishers, 356, Strand, near King's College.

# London Medical and Surgical Journal.

No. 52.

SATURDAY, JANUARY 26, 1833.

VOL. II.

## LECTURES

ON THE

## PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

Delivered at the University of London,

SESSION 1832—1833,

BY

PROFESSOR SAMUEL COOPER.

LECTURE XX., DELIVERED NOV. 19, 1832.

GENTLEMEN,

In the last lecture I was considering the treatment of simple erysipelas; and, from what was then stated, I think you will comprehend, sufficiently well, that no one kind of treatment is applicable to all the various stages of the disorder, or to all the different conditions in which you will find the patient in the several periods of the complaint. In the first stages, the treatment should be antiphlogistic; but, in the subsequent ones, when the patient is much reduced, tonics, cordials, and even stimulants, may be as requisite as depletion was at an earlier period. Bark, the sulphate of quinine, the diluted sulphuric acid, wine, and plenty of light farinaceous nutriment, may now be as useful as bleeding and other antiphlogistic means were in the commencement of the complaint. Even the subcarbonate of ammonia may sometimes be advantageously prescribed, or other powerful stimulants, though I do not follow this practice much myself, and would advise you not to be too venturesome with it. As for the idea, that bark possesses a specific power of stopping the progress of the disorder, it is now renounced by every surgeon of judgment; no sensible practitioner entertains such an idea, any more than the notion, that erysipelas is always connected with debility.

VOL. II.

With regard to the local treatment of this disorder, I may observe, gentlemen, that attempts have sometimes been made to resist the progress of erysipelas by exciting a different action in the capillary vessels on the surface of the body. This has been done in various ways; first, by blisters: but the trials made of them, in this country, do not appear to have been encouraging, though, I think, they have not been upon a scale adequate to determine finally the merits of the plan. The use of blisters is recommended by Baron Dupuytren, a surgeon, whose ample experience and accuracy of observation give high authority to all his statements relating to the practice of surgery: in fact, he commonly employs blisters in erysipelas, though not, I believe, in the simple or superficial form of the complaint, but in the phlegmonous; neither does he use them on the principle I have mentioned, his object being to produce a considerable effusion of serum, by which means the vessels are unloaded, and, in this manner, blisters may do good in phlegmonous erysipelas. Neither ought they, perhaps, to be altogether condemned in superficial or simple erysipelas, when the disease has receded suddenly, and disturbance of the functions of some of the internal organs either has come on, or is apprehended; then blisters may be useful, by reproducing irritation on the surface, from which it has suddenly disappeared. In proportion as they have this effect, they will sometimes relieve a still more dangerous affection of internal parts.

Of late, another plan has been proposed, namely, the application of nitrate of silver to the skin affected with erysipelas. This practice is favourably spoken of by Mr. Higginbottom, and has been tried by him and some other surgeons with success: in fact, it is ascertained that if the nitrate of silver be applied beyond the boundary of the erysipelas, it will really prevent the extension of the disorder over the line marked out by the application. This is a very useful fact to remember; for if, in a case of erysipelas erraticum, you were to perceive, that the inflammation had a tendency to spread from the trunk towards the head,

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which, you know, is a situation in which erysipelas is frequently productive of urgent danger, then it would be rational practice to endeavour to limit the extension of the disorder in that particular direction, by means of the nitrate of silver. Gentlemen, I should here inform you, that Mr. Higginbottom applies the caustic not merely to the surrounding skin, but sometimes also to the part affected with erysipelas,—to the disease itself.

Mercurial ointment is sometimes applied to the surface of the body attacked with erysipelas. Whether it acts by producing a change in the action of the vessels of the part affected, or by promoting the absorption of effused fluid, or in some specific way, may be rather difficult to decide, especially while the real efficacy of such practice still continues a disputed point. We all know, that friction with mercurial ointment will, in some constitutions, actually bring on erysipelas; but this fact is no proof, that the same application may not, in other instances, arrest the progress of the disease, after it has come on, just in the same way as leeches powerfully check erysipelas after it is formed, although, when put on the sound skin, they will sometimes, in particular states of the constitution, positively excite the disorder.

The effect of pressure on erysipelas has been tried, especially in France; but, as far as I can judge from the reports given us of this practice, it is not advisable in the early stages of erysipelas, though it may be useful when the disease is on the decline, and has become chronic, as it were, and the parts continue swelled and oedematous. Then, I believe, it will often do good.

Gentlemen, in the first stages of *simple* or *superficial erysipelas*, the practice, usually adopted in this country, consists in the application of leeches and fomentations to the part, and, in some instances, cold evaporating lotions. The latter are used principally when the erysipelas has arisen from external violence; though some practitioners frequently try them in the erysipelas consequent to fever; and really the accounts given of such treatment is in general favourable, and by no means calculated to justify much fear of the translation of the disease to some internal part, as the result. When the skin is allowed to become dry and hot, the patient always becomes very uneasy, and sometimes cannot bear even the pressure of any ordinary applications. Under these circumstances, I have known considerable relief derived from repeatedly moistening the inflamed surface with the feather of a quill dipped in the mucilage of quince seeds. Formerly, it was customary to sprinkle flour, hair-powder, starch, or other finely levigated absorbent powders, on the part; but the method has not at present many advocates, because when vesications are present, the discharge from them becomes mixed with such powders, and hard incrustations are produced, sometimes occasioning considerable irritation, and even ulceration. I

may say, therefore, gentlemen, that this plan is not commonly employed by modern surgeons, though, in former times, when the practice in erysipelas was more inert than now, many practitioners, instead of trying leeches, or cold, were content with putting flour, hair-powder, or starch, on the erysipelatous surface. Whether the patient had reason to be equally content is another question.

Now, gentlemen, let us advert to the *treatment of phlegmonous erysipelas*, which, you know, is characterized, by its tendency, to spread more deeply into the cellular membrane than the simple form of the disorder, and also by its disposition, if not speedily checked, to cause suppuration and sloughing in that texture. This more severe variety of erysipelas requires, at its commencement, the free use of the lancet, the application of numerous leeches to the part, and the administration of calomel and antimony, properly followed up by saline aperient medicines, so as to produce copious evacuations, if possible, both from the skin and bowels. You will begin, gentlemen, with bleeding the patient largely, from the arm, and putting a good number of leeches on the part. It is not many years since most practitioners were absolutely afraid of putting leeches on the skin affected with erysipelas. I know that Latta, and a few other surgeons, commended the practice; but it was rarely pursued to any extent, and for the most part not ventured upon at all. The apprehension prevailed, that leeches would increase the inflammation instead of diminishing it, which notion seemed to be confirmed by the fact, that the bites of the leeches will sometimes bring on erysipelas. Thus, in certain constitutions, where leeches are used for the cure of ophthalmia, they will produce erysipelas of the head and face; but, gentlemen, though the bites of leeches may excite erysipelas in the sound skin, when a predisposition to it exists, they have no injurious effect when the disease is already formed; but, on the contrary, in the early stages of erysipelas, leeches are most powerful agents in checking the progress of the disease. In many cases, I think, they are more efficient than bleeding from the arm, and probably they are so, because the bites of them occasion a considerable evacuation of blood and serum immediately from the part. For such reasons, I recommend you to employ leeches freely and repeatedly, according to the exigency of the case. Thirty years ago, the boldest surgeons would have been dismayed at the sight of three or four dozen leeches all at work in erysipelas, or, indeed, in any other disease; but now we are familiarized to these bloody spectacles, and acknowledge their usefulness.

In the beginning of phlegmonous erysipelas, cold evaporating lotions are more efficient in stopping the disease, than warm emollient applications: in my own practice, I generally apply them, not merely to the part affected, but also to the whole limb, taking care also

that the linen be kept continually wet. However, cold applications will only answer in the first stage, and afterwards you should employ warm emollient ones, which will give greater relief. When antiphlogistic measures, and especially bleeding, purging, cold applications, which I consider deserving of employment in the way already explained, prove unavailing, then the question arises, what is to be done? The cellular membrane is now loaded with serum, and there is a considerable degree of swelling: if something be not speedily done, there will be suppuration and sloughing of the cellular membrane. Under these circumstances, gentlemen, it must be acknowledged, that the principal indication is to let out as much of the effused serum as possible; but the way, in which this should be done, is a point on which different opinions are entertained. In France, as I have already observed, Baron Dupuytren, with this view, blisters the surface, while, in England, some surgeons make scarifications or minute punctures in the skin; some practise numerous incisions, an inch or an inch and a half long; and others make deep and extensive cuts, measuring sometimes not less than two or three feet in length. With regard to the practice of blistering, I can say nothing of it from my own experience; but, as it is thought favourably of by Baron Dupuytren, it must be entitled to consideration. Mr. Copeland Hutchinson was led, some years ago, to try the plan of making incisions in parts affected with phlegmonous erysipelas, with the view of preventing gangrenous mischief: the incisions, recommended by him, are from an inch to an inch and a half in length, and vary in number from sixteen to eighteen, according to the extent of the erysipelatous surface. This method he practised with success when he was acting as surgeon to the Naval Hospital at Deal. A great quantity of serum and blood was thus evacuated from the part, and the effect on the complaint, according to the report contained in the *Medico-Chirurgical Transactions*, strikingly beneficial, suppuration and dangerous degrees of sloughing in the cellular membrane being commonly averted.

Of the methods now mentioned, I prefer that practised by Dr. Dobson, which consists in making many small punctures in the part with the point of a lancet; these seem to discharge the serum, and to unload the cellular tissue, quite as well as incisions two or three feet in length. Moderate scarifications, or numerous pricks, with the point of a lancet at all events, form a sufficient outlet for the serum, distending the cellular tissue: thus they obviate tension, the great object in view; and, as they are followed by more or less bleeding, their influence in checking the progress of the inflammation is very powerful. All surgeons, who have tried this treatment, praise it on the ground both of its mildness and its efficacy. In anasarca, no extensive gashes are requisite to let the serum out of the cellular tissue, mo-

derate scarifications answering every purpose. Incisions, two or three feet in length, are certainly not so harmless as sometimes represented. Is there no risk of their producing, through the medium of the nervous system, a sudden collapse, from which the patient will never rally? May not the profuse hæmorrhage, from the division of large superficial veins and an infinite number of arterial branches, sometimes lead to a similar catastrophe? Have not these unmerciful sweeps of the scalpel been occasionally followed by paralytic effects from the division of one or more of the cutaneous nerves? These are possibilities which the history of the subject discloses; and, if you decide to try the long incision-practice, in favour of which I might quote the names of several gentlemen, whose judgment on other points I respect, be sure to remember the circumstances which I have specified, for they are not fanciful apprehensions, but things which have been realised in practice. The recollection of them, united with the consideration of what we have in view, in using a cutting instrument at all, namely, the discharge of serum from the distended cellular tissue, makes me prefer a reasonable number of scarifications, which will let out that fluid very effectually, and a quantity of blood, that will not create any risk of a fatal depression of the system.

Gentlemen, my wish is, that you may give a fair trial to simple punctures, or scarifications, and also to incisions, both long and short, and then judge for yourselves. Several members of the profession, whose talents I admire, declare themselves in favour of incisions; as, for instance, Mr. Lawrence, of St. Bartholomew's; Mr. James, of Exeter; M. Beauchêne, Surgeon of the Hôpital St. Antoine, at Paris; M. Rayer, the author of the justly celebrated work on *Cutaneous Diseases*; and Mr. Liston, of Edinburgh. Some of them are not, however, advocates for incisions of prodigious length, but only for punctures; so that, after all, there may not be so great a difference of opinion between them and me as might be supposed. I fully admit, that when phlegmonous erysipelas remains unchecked, notwithstanding antiphlogistic treatment, and a fair trial of cold applications, the principal indication is that of diminishing the quantity of serum in the subcutaneous cellular tissue, by which means the tension will be obviated, and the occurrence of suppuration and gangrene, in that and other textures, be most likely to be prevented. Thus you will do every thing, which it is in the power of surgery to accomplish, for averting such mischief, as will either mutilate the patient most seriously, or destroy life altogether.

Gentlemen, when matter is formed in the part, no disagreement has ever prevailed about the practice which ought to be pursued; it will then be necessary for you to make incisions, adequate to the discharge of the matter: under these circumstances, free incisions are acknowledged by all surgeons to

be indispensable: they were recommended at least thirty or forty years ago, and, consequently, there is nothing new in the practice. Whatever merit belongs to the plan of letting out the serum in the cellular tissue, and procuring a discharge of blood from the parts by the use of the knife in an earlier stage of phlegmonous erysipelas, belongs undoubtedly to Mr. Copeland Hutchinson. The claims of others are confined to the particular ways, which they may prefer, of executing the same purpose.

The first stages of phlegmonous erysipelas being over, depletion becomes as injurious as it was beneficial and right at an earlier period. You must now, gentlemen, completely reverse the treatment, and, instead of antiphlogistic remedies, you must employ tonics, cordials, and sometimes even the most powerful stimulants. Bark, the sulphate of quinine, and the diluted sulphuric acid, are now the best medicines. The subcarbonate of ammonia is sometimes prescribed. I mention this medicine, because certain surgeons of considerable experience think well of it; but it is not my own custom to employ it; I sometimes use wine, but not ammonia, in the treatment of the debilitated stages of erysipelas. Gentlemen, I need not say any thing more of mercurial ointment, nitrate of silver, and pressure, because I have already noticed them in describing the treatment of simple erysipelas. The nitrate of silver is much confided in by Mr. Higginbottom in phlegmonous erysipelas. As for pressure, it can never be employed with advantage in the early stages of the disorder, though useful afterwards when the limb continues affected with chronic thickening and œdema.

Gentlemen, we have next to consider the *treatment of œdematous erysipelas*. As this form of the disease occurs only in shattered, broken constitutions, depletion to any extent is scarcely advisable; if it be of service at all, it is at the very first, and then in a very moderate degree. In œdematous erysipelas, you more frequently find it necessary to employ tonics and stimulants, bark, quinine, wine, and light nutritious diet. The subcarbonate of ammonia is frequently given in this variety of erysipelas. Fomentations are the best applications, and for this purpose a decoction of chamomile flowers may be used, with a proportion of camphorated spirit in it. If the quantity of serum be considerable, it will be proper to make minute scarifications in the part; or, if the disease will admit of it, pressure may be employed; indeed many practitioners, amongst whom I notice the justly eminent Dr. Rayer of Paris, believe that pressure is more adapted to this, than to any other form of erysipelas.

In the next place, gentlemen, I have to solicit your attention to a species of inflammation, which is so like phlegmonous erysipelas as sometimes to be considered as not essentially different from it. The disease to which

I refer, was named by Dr. Duncan *diffuse inflammation of the cellular tissue*. It differs from common phlegmonous erysipelas, as far as I can judge, in the cutaneous inflammation itself being absent, or very slightly marked, and the skin, instead of being of an increased temperature, as in phlegmonous erysipelas, being colder than natural. In some instances, the disease runs its course, and brings on extensive suppuration and destruction of the cellular membrane, without any appearance of redness of the skin. Then, gentlemen, I may add, that in all true instances of diffuse inflammation of the cellular tissue, when inflammation of the skin does occur, it is secondary. Here is another difference between this disease and phlegmonous erysipelas, in which the affection of the skin is primary, and that of the cellular membrane secondary; but, in diffuse inflammation of the cellular tissue, if the skin be affected at all, it is after the disease has made some progress in the other texture.

The disease arises from external injuries; sometimes from a puncture received in dissection; sometimes from bites of venomous reptiles, as from the bite of a snake; frequently it is excited by fever. In many examples, it spreads with extraordinary rapidity through the cellular substance of a whole limb, and even of great part of the trunk; and then it usually has a fatal termination. In the cases, recorded by Dr. Duncan, when the exciting cause had been applied to the hand, the seat of the secondary inflammation was principally in the axilla, extending towards the sternum, up the neck, and down the side of the body, as far as the crista ili; and, in Professor Dease's case, who died of its effects, the inflammation extended as far as the lower part of the thigh. Like erysipelas, it is sometimes transferred from one side of the body to the other. It is mostly accompanied by excessive constitutional disturbance, even in its earliest stage, and afterwards, by fever of a typhoid character, marked by extreme debility of the muscular system, an extraordinary degree of mental depression, and a quick, irregular, faltering pulse. Gentlemen, the treatment is in some measure regulated by the nature of the exciting cause; thus, when the disease has arisen from the bite of a snake, or from dissection, the treatment required may not be exactly like what would be pursued in some other forms of the complaint. This, however, is what you will understand better when I call your attention to those cases in a future lecture. At present, I shall only speak of the local treatment. In the early stage, numerous leeches should be applied, and cold applications employed, but, afterwards, fomentations and poultices give most relief. Blisters seem to have a beneficial effect in checking and diminishing the effusion of serum, and thus lessening the distention of the cellular membrane, the texture chiefly affected. However, the grand means of relief, after these plans, assisted by proper constitutional remedies are not found to answer.

consists in making punctures, or incisions; as is practised in phlegmonous erysipelas. Cupping the part is also of service in stopping the disease, especially at first; for thus a great quantity of blood may be drawn out, and a considerable quantity of serum discharged.

Notwithstanding the affection of the skin be only secondary, and that of the cellular tissue primary, I discern so great resemblance between this disease and phlegmonous erysipelas, that they appear to me to be perhaps only varieties of the same disease. The local treatment, as we have seen, is generally conducted on precisely the same principles, though the nature of the exciting cause may, in particular instances, make some difference in the plans to be adopted.

Another kind of inflammation, not yet described in these lectures, is that seen in the *furunculus*, or *boil*. The inflammation attending a boil is so peculiar, that the late Professor Scarpa, and other eminent surgeons, frequently employ the expression *furuncular inflammation* in their writings. A boil may be defined to be a circumscribed, prominent, hard, very painful, inflammatory swelling; it projects above the skin and is of a conical shape, the apex being above the surface, and the base below it; and the colour of the tumour is a dusky red, sometimes inclining to purple. The apex of the swelling soon becomes tipped with a whitish pustule, or minute slough, under which is lodged a mass of disorganised cellular substance, called in common language the *core*. The conical shape of a boil renders it much exposed to irritation from friction, accidental blows, and other kinds of disturbance; and hence, in children and delicate persons, the swelling may be attended with fever. The largest boil does not exceed in size a pigeon's egg; but most of them are considerably smaller, not above the size of a marble, and even less. In consequence of a boil always containing a portion of mortified cellular membrane, the suppuration in it is imperfect; in fact, it never takes place in the centre, which is occupied by the core, but only at the circumference, where it is in contact with the sound parts. In the second stage, when the white speck is formed, the skin may ulcerate in one or two points, so as to produce diminutive openings, from which an inconsiderable quantity of thin matter escapes, leaving the core behind. When, however, the apertures increase in size, the core itself comes out, and the part heals; but this is a slow and tedious process. Boils appear to be connected with a peculiar state of constitution, as may be inferred from the considerations which I am going to mention. First, they occur chiefly in children, and young persons of a plethoric habit, or in the decline of febrile diseases, namely, typhus, measles, and the simple erysipelas that is preceded by fever. Many individuals are found to be annoyed with boils at the same time in particular states of the atmosphere.

Persons addicted to ardent spirits are also well known to be very liable to boils. In the treatment, the principal indication is to procure the discharge of the core: this may be done by making a sufficiently free puncture or incision, and it is the usual plan. If the boil be very small, however, the case is not always deemed of importance enough to require the use of a cutting instrument. The part is then sometimes covered with a piece of adhesive plaster, on two principles; first, to protect the conical prominent tumour from friction, which always gives a great deal of pain; and secondly, to accelerate the process of ulceration in the skin, by which means an outlet is sooner made for the evacuation of the core than would otherwise happen. The ulcer, left after the evacuation of the core, is observed to heal much better with stimulating applications, than simple salves, or emollient poultices. A solution of the nitrate of silver, a lotion containing sulphate of zinc, or the red dressing, as it is called, answer better than milder applications. When boils are large, or numerous in a young plethoric person, venesection will sometimes be proper; and in many cases alterative medicines are indicated, as the compound calomel pill, the carbonate of soda, or small doses of chalk with mercury. The liquor potasse, with bitter tonic medicines, is sometimes the most useful prescription.

Gentlemen, another example of peculiar inflammation is seen in the carbuncular form of it, which is totally different from phlegmon, or common inflammation; from erysipelas; from diffuse inflammation of the cellular tissue; and, in some very important respects, from *furuncular inflammation*, to which, however, it has a resemblance in certain particulars. A *carbuncle*, or *anthrax*, is a broad, flat, hard, distinctly circumscribed, tumour, of a dark red or dull brown colour, containing a mass of mortified cellular substance, and a quantity of bloody sanious matter. It differs from boil, not only in its greater flatness, but in the greater violence of the inflammation, which has a tendency to spread more deeply and widely, than that of a boil in the cellular tissue. What may be called the base of the swelling is much wider. The sloughing under the skin, in fact, is more considerable in a carbuncle, which differs also from boil in the greater severity of the constitutional symptoms, and in the kind of individuals usually affected. Instead of attacking young plethoric persons, as boils do, it is chiefly met with in persons of shattered constitution, who are above the middle age, and have been intemperate and dissipated in their habits. It begins in the form of a pimple, which extends more and more deeply, and at the same time increases in diameter, accompanied by a hardness, frequently compared to that of brawn. Afterwards, however, it becomes spongy, and loses its brawn-like firmness. Boils, as I have stated, are seldom larger than

a pigeon's egg, but carbuncles are much larger. I have seen several, each of which was as large as a common dinner plate. I attended an elderly person the winter before last, who had one on his back of a still greater extent. The disease is excessively painful, accompanied with a burning sensation, and an annoying feeling of stiffness. At length, one or more vesicles, filled with a bloody sanies, rise upon the surface of the tumour, and soon afterwards become converted into so many small apertures. Gentlemen, as soon as you see these vesicles, you may be sure, that a great quantity of sloughy cellular substance is already contained in the tumour, and that the sooner this is discharged the better. In most instances, if the making of a free incision be delayed longer, many small ulcerated openings are produced, communicating a perforated, or, as it is fancifully called, a *sieve-like* appearance to the skin; but all these apertures are insufficient for the discharge of the contents of the tumour.

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## CLINICAL LECTURES

AT THE

MEATH HOSPITAL, OR COUNTY OF  
DUBLIN INFIRMARY,

DELIVERED BY

DR. GRAVES, M.R.I.A.,

*King's Professor of the Institutes of Medicine  
in the School of Physic, Dublin.*

(Corrected by himself.)

SESSION 1832-33.—LECTURE VII.

GENTLEMEN,

In continuation of the last day's lecture, I resume the consideration of the medicinal properties of oil of turpentine, and proceed to make some observations on its utility in the convulsions of children and infants.

I have spoken before of the convulsions of epilepsy, and of the advantage derived, in such cases, from the use of oil of turpentine: a few words now on its utility in those convulsions which attack infants at the age of two, four, or six months. When we consider the convulsive affections of the infantile period, we find that they may arise from a variety of causes. In the first place, they may be produced by the process of dentition. Some persons seem to think this impossible: but it is not only possible, but true; for teething is capable of exciting a very great degree of irritation in the system. We also observe that an irritable state of the brain, accompanied by a hydrocephalic tendency, will produce convulsions; but in very many instances, particularly in children of the ages mentioned above, they proceed from intestinal irritation. Of those forms which spring from the irritation of dentition, or of cerebral excitement, I do not intend to speak, as, on these matters,

the standard medical works furnish abundant information. I shall restrict myself, therefore, to some observations on those convulsions which depend on intestinal irritation. As such convulsions frequently arise from causes which affect digestion, and produce a change in the mode of nutrition, they appear very soon after birth. The animal which but a short time before was nourished by the placenta, is now supported by ingesta; and hence, from this sudden change, if there be any source of irritation existing in the system of the child, or in the nature of its food, an unhealthy state of bowels rapidly ensues. To the consequences of this affection, manifesting itself so soon after birth, nurses have given the name of *nine-day convulsions*. Again, when another change is made, and the nurse's milk is left off, children are also liable to convulsive fits, and these are the convulsions of ab lactation. In fact, at any period during the first year, infants are very apt to get convulsions, from various causes. If the mother uses an improper kind of food or drink, or gets into a bad state of health, or be strongly affected by mental emotion, the quality of the milk will be suddenly changed\*. Under all these circumstances, or if the child be over-fed (a very common fault) the bowels get out of order, the whole intestinal canal is thrown into a state of irritation, and convulsive fits succeed.

It is necessary to be more explicit on this subject. When you are called to treat a case of infantile convulsions, bear in mind that they very frequently arise, particularly during the first six months, from the cause before mentioned, and this should, therefore, claim at once your attentive consideration. I remember the time when it was the common practice to treat every case of convulsions as if it were an hydrocephalic attack, and when antiphlogistics, calomel, and cutaneous irritation, were the indiscriminate means employed in combating every form of this disease. If a child happened to get a convulsive fit, it was immediately said, here is inflammation or congestion of the brain; and leeches were applied in successive relays, calomel given in large doses, egg-shells, crabs' eyes, magnesia, and other absorbents administered, and the unfortunate infants cruelly tortured by the repeated application of blisters to the scalp. I have seen cases where this blistering was carried to such an extent, that the child had not a place to rest its head upon. It is to Dr. Gooch we owe the valuable discovery, that there is in children a state of heaviness of head and torpor, accompanied by a tendency to convulsions, in which depletion cannot be employed, and where narcotics and

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\* It has been lately proved, that the custom adopted by some, of keeping the child at the breast for a year or a year and a half, is both unnatural and injurious. Every child should be weaned when nine months old.

even stimulants may be used with advantage. Doctor Locock asserts, that convulsions of this nature may be recognized by the depressed state of the fontanella, an assertion which I have not yet verified. With respect to leeching, I have to remark, that a single leech to an infant is equal to a bleeding in an adult; and yet how often have we seen children leeched and leeched, until, becoming pale and exsanguineous, they sink as much from loss of blood as from the effects of disease.

With respect to the causes and periods of indigestion in children, I have already spoken. There is one point more which I wish you to hold in memory. Milk is a compound fluid, a beautiful emulsion furnished by the hands of nature, in which sugar, oil, and curd, are blended with a certain proportion of water. Now, when a compound fluid, such as milk, enters the stomach, and is submitted to the process of digestion, those parts which are soluble in water are absorbed, and those which are not, become first coagulated, and afterwards undergo resolution in the gastric juice. Thus, while the water and sugar are absorbed, the curd of the milk is separated from it by coagulation, and forms a solid substance, which is acted on by the stomach, and becomes dissolved by the agency of the gastric juice, and in this way contributes to nutrition. Not a particle of the milk, however, ought to enter the duodenum until it has passed through the usual process of digestion. As the first step to the accomplishment of this is the coagulation of the curd, this occurrence takes place with extraordinary rapidity: and it is a sign of health if the milk be thrown up in this state immediately after it has been sucked. The rennets of young animals give striking evidence of this power. But if it should happen that the stomach does not act properly, and the curd remains undissolved, what is the consequence? The curd passes into the alimentary canal in a condition different from that in which nature intended it should, and consequently produces intestinal irritation. None of the purgatives given to children are attended by half so much griping as this substance. This explains the phenomena which, in such cases, present themselves to our observation. The child becomes griped, irritable, and feverish, his tongue is loaded and white, he gets restless, and now and then utters a shrill scream. In this way the disease may go on for a considerable time; as the child is dropping asleep, he starts suddenly and screams out, bends himself in the form of an arch, and throws his head back as in opisthotonos. I have seen children in this state for a week. The physician, or nurse, gives castor oil, or some other purgative, and a great quantity of the curds are passed, and surprise the child's relatives. On examining the discharge, you find it consisting of lumps of different sizes, coloured imperfectly with bile, and having a burnt appearance; on breaking them up, you perceive them to be white internally, and consisting of indigested curd.

You remove these by purgative medicine, and the child gets well. Now, we all can do this; it is clearly laid down in books: you are told to examine the egesta, and give purging medicine where it is necessary. But there is one fact which has not been noticed. When you have treated the child in this way, and the attack has been cured, if the child is very strong, when put to the breast again, he may go on well, and you have no further trouble, but if he is weakly, or of an irritable habit, when he is brought back to the suck again, or spoon-fed with milk, the same process of imperfect digestion takes place, and he gets another fit. The physician is again called in, and repeats the purgative, and the child gets better a second time; and, in this way, the physician goes on giving medicine, and the mother giving milk, and every body wonders at seeing what a quantity of foul stuff passes from the bowels. How are you to avoid this? By making the infant abstain from milk in any shape for twenty-four hours, sometimes for the space of two, or even three days. It is incredible how small a portion of milk, even in the most diluted state, will keep up this disease, acting like a species of poison on the intestinal mucous surface. You know, that animal poisons, such as the variolous, or vaccine virus, will affect the system, even when applied in a state of extreme dilution, and you can therefore conceive, that a small portion of milk will operate in this manner. I attended a case of this disease some time ago; the child had a relapse, and, on being called in again, I asked the mother whether she had given it any milk, and she told me scarcely any. I am always suspicious where I hear the word *scarcely* used; and, on requesting to see the kind of food she had been administering, she handed me a bowl of barley-water, with the usual proportion of milk and sugar in it: it is in this way that we see the disease prolonged week after week by the prejudices of the nurse and the ignorance of the physician. Well, if you forbid milk altogether, what will you give the child? Let him take chicken-broth, barley-water, thin panado, veal-broth, or whey. How long are you to continue this? The number of days will depend on the power which the child possesses of regaining the proper tone of the stomach; some children will have the stomach out of order to-day and well to-morrow, and the length of time you are to keep up this diet will vary considerably. When you are called, therefore, to a case of convulsions, inquire into the history of its symptoms, the nature of the alvine evacuations, and the quality and quantity of your patient's food; and if you find that, before the attack, the child's bowels have been in a bad state, that they have been for some weeks inclined to be loose, or that the stools are, at the time, similar in colour and consistence to what I have described (though, by the by, you are often told, that every thing is quite right when it is not the case), you will then be able to judge properly of the nature of the



case, and, by giving aperient medicines, you will probably not only cure the disease, but also prevent a return of the convulsions. Sometimes, however, the convulsive fits will remain after the irritating *sordes* have been removed by purgative medicines. Absorbents are next made trial of. These have a very beneficial influence in many cases, they can do no harm, and where acid is present (and this occurs in the stomachs of children to a greater extent than in those of adults), prove mildly purgative. But if the convulsions continue, what else will you prescribe? I remember attending, not long since, an infant, about three or four months old, who had been for some time under treatment for convulsions. Leeches had been applied to the epigastrium; it got camomel, castor oil, and hydrargyrum cum creta, absorbents, aperient and fetid enemata, and blisters to the vertex and stomach. Still the convulsions went on. Well, what did I do? I prescribed the following mixture, **R.** Spirit. terebinth. ℥j.; olei ricini, ℥iv.; syrupi papaveris albi; mucilaginis g. Arabici, aquæ feniculi āā ℥ij. Of this mixture, when well shaken, exactly ℥j. was to be given every third hour; and what was the result? It operated on the bowels, and produced a copious discharge of urine, a marked improvement took place, and towards evening the convulsions entirely ceased.

My friend, Dr. Brereton, has, in similar cases, after the bowels were evacuated, succeeded in preventing a recurrence of the convulsions by means of the following mixture, suited to a child six months old:

**R** *Olei anisi*, gr. iv.  
*Sacchari albi*, gr. x.  
*intimè misceantur et adde*  
*Aquæ fontis*, ℥ij.  
*Pulv. rhei*, gr. x.  
*Carbonat. magnesiæ*, ℥j.  
*Tincturæ opii*, gr. iv.  
*Spirit. ammoniæ fetid.* gr. x.

*Sumat cochleare j. mediū tertio q. q. horâ.*

It is to be observed, that much caution is necessary in giving such combinations containing opium to infants, but there is a period when depletion ceases to be useful, that a mixture like this will prove the most effectual means of curing convulsions. In such cases of convulsions, in addition to the use of purgative medicine, prescribing the mother's milk, and giving spirit of turpentine, you may, during the first 24 hours, while the child is strong, order a warm bath, applying, at the same time, a sponge dipped in cold water to the head; or, if the child be weak, incline its head over the side of the cradle, and use the cold sponge, and you will find that it will diminish the fit.

I will dwell no longer on this topic, but pass on to very remarkable cases at present in the hospital. If I were asked what was the most singular effect of medicines in the treatment of disease that ever came under my observation, I would say, that it was in the

case of a man you have seen in the upper ward, which has been noted, with his usual ability, by my friend, Mr. Costello, and forms a *tout ensemble* of disease which I have seldom seen paralleled. In the first place, he had dropsy, his legs were greatly swelled and anasarcaous,—no, the first symptom was, that he is an old man, and that is a bad item in the catalogue of his ailments; in the next place, he had not only œdema of the extremities, but also ascites, and very great enlargement of the liver; this organ was protruded forward in a remarkable manner, and you could at once feel its indurated and rounded edge forming a large tumour, stretching far into both hypochondria. On inquiring into the state of the digestive functions, you found that his tongue was parched, of a dark brown colour, and thickly furred; that he suffered from excessive thirst, nausea, occasional vomiting, griping, and diarrhoea, accompanied by discharges which were any thing but healthy; that he had no appetite, that he was labouring under weakness, fever, ascites, anasarca, and, to complete this melancholy catalogue of maladies, old age; from such a combination of symptoms we looked on his case as hopeless, and did nothing for two or three days, because it was one which required a careful consideration. We perceived that it was impossible to give him mercury, and besides that, the state of the liver did not indicate it. Now, what was the state of this man's liver? The nature of this swelling cannot at all times be easily distinguished from that which proceeds from hepatitis. When hepatitis sets in with symptoms of jaundice and fever, you are aware of the nature of the disease, and you can cure it with mercury and bleeding. Again, you have a chronic enlargement of the liver, with pain at the top of the shoulder, and this you can remove by moderate antiphlogistic treatment, purgatives, and a cautious employment of mercury. But there is a change in the liver, which is apparently like inflammation, and which is not hepatitis, but hypertrophy, or morbid growth. You will, however, generally find, that though in this case there is great enlargement, yet very little pain is felt, and you rarely find it accompanied by jaundice. I must confess, however, that I have seen a man in Sir P. Dun's Hospital, in whom an hypertrophied liver was excessively painful, and I am aware also, that it may be attended by jaundice. I endeavour to draw a distinction, but can only sketch it. They are, however, two diseases, which require a very different treatment. Cases of this disease resemble hepatitis, and cases of hepatitis put on the semblance of this affection, and it is only in extreme cases that you can draw a correct line of demarcation. The case before us is, however, a very good example of the treatment to be pursued, and this is the chief thing we have to consider. In those hypertrophied livers, the substance of the organ is enlarged without having any lymph thrown

out, and you never find any abscesses. Mercury will not affect a liver of this kind.

In this instance, the principal remedial agent we employed was the hydriodate of potash. The first thing which suggested the use of this medicine in hypertrophied livers, was the absorption which it was seen to produce in cases of goitre. We gave this man ten grains of the hydriodate of potash four times a day for a fortnight, and you have all witnessed the extraordinary improvement which took place in his symptoms. His pulse came down, his tongue became clean, the state of his bowels improved, and the dropsical swelling and enlargement of liver considerably subsided. If, therefore, you meet a case of enlarged liver, in which you cannot clearly trace the symptoms to inflammation, and it presents analogies to the present one, you will employ the hydriodate of potash. We also used leeches to the anus. When diarrhoea appeared, different remedies were proposed by gentlemen here. I thought leeching the best practice, because it would at once diminish intestinal irritation and lessen the congestion of the liver. French practitioners have discovered, that the diarrhoea of fever is safely and effectually stopped by applying a few leeches to the anus, and that this effect depends on removing the intestinal congestion. In the present instance leeching produced immediate relief. In cases of chronic congestion of the alimentary canal and enlargement of the liver, I am in the habit of applying two leeches every second day to the verge of the anus, and I repeat this sometimes as often as fifteen times, and that with considerable benefit. Leeching, to the amount of eight or ten leeches once or twice, is very different from this repeated application of a small number; the former is adapted to acute inflammation—the latter to chronic. You will also find that conium or hyosciamus, in combination with the hydriodate of potash, will contribute materially to the patient's relief. Conium is a remedy which is found to possess great efficacy in dissolving certain tumours. Baron Stoerk overrated its value, and thought it capable of curing cancer. This is not the case; but still, in addition to their narcotic effects, conium and hyosciamus possess a remarkable discutient power. The following is the formula employed in this man's case:—  
**R** Aquæ fontis, ℥j.; hydriodatis potassæ, gr. x.; tincturæ hyosciami, ℥ss.; syrapi zingiberis, ʒj. M. ft. haustus quater in die sumendus. Would you give opium in this case? Is there any difference between it and the narcotics we have used? I say there is, for besides impeding the action of the hydriodate of potash, it operates injuriously on those cases of hepatic disease. A few words respecting another remedy, that is to say, the use of setons. I attended a lady, with Dr. Ireland, who had seven distinct attacks of a liver complaint in the space of five months. She was jaundiced during each fit, and when the disease went away it left behind it an enlarged

state of the liver, notwithstanding the repeated use of mercury. This was removed in some time by the use of a seton. I did not then know the medical virtues of the hydriodate of potash, or I might have cured the disease more rapidly. Yesterday a gentleman called on me with a case sent for consultation from London. The patient, whose disease it describes, is now under the care of two eminent physicians, Dr. Elliotson and Dr. Johnson. His liver is greatly enlarged but not tender, and he is dropsical, although a young man. He had tried mercury in vain many months ago. Hydriodate of potash was ordered by his present attendants, and of course I concurred with them in opinion, having just witnessed its efficacy in the case before us. I also advised the insertion of two setons over the most swollen portions of the liver, having frequently seen hepatic engorgement and tumefaction, when become chronic, yield to the establishment of one, two, or even three setons.

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## CLINICAL LECTURES

DELIVERED BY

DR. ELLIOTSON,

AT ST. THOMAS'S HOSPITAL.

SESSION 1832-33.

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### LECTURE IX.

*Erysipelas of the Face and Scalp—Use of Nitrate of Silver—Asthma, combined with Bronchitis—Use of Lobelia Inflata—Bronchitis with Diseased Heart—Value of Auscultation—Hydrothorax—Rheumatismus Syphiliticus.*

GENTLEMEN,

I OMITTED to describe in my last lecture, for want of time, a case of *erysipelas*, in which the nitrate of silver proved efficacious. It occurred in a woman, aged 54, and commenced on the left side of the nose, soon extended over her face and forehead. It presented the usual symptoms, redness, heat, and swelling, which were so great, that her eyes were completely closed; the pulse was very quick; she felt thirsty; and there were severe constitutional symptoms. Previously to my seeing her, she had been ordered twenty leeches to the face, and, after their application, cold water was applied constantly to the part, and five grains of the hydrargyrum cum creta were given her every six hours. The next day, when I visited her, she was very bad, though somewhat relieved by the leeches. I immediately ordered twenty more to be applied, and to be repeated the following day; her bowels being confined, I ordered half an ounce of castor oil to be given her, which was to be repeated every third hour until the bowels were open; at the same time, the nitrate of silver was applied round

the scalp, beyond the inflammatory part; another similar application was made round the neck, to prevent the inflammation from extending to that part, so that a complete eschar was formed both above and below the diseased part. This checked the inflammation in a great measure, but there was one part where the nitrate of silver had not touched; this, however, was not perceived at the time of its application, not until the eschar had become black, and, I have no doubt, it was owing to some greasy substance about the scalp in this part, so that the nitrate of silver would not remain on it; here the inflammation extended, and after it had passed the margin, along this crack, it again spread rapidly, consequently another application of the nitrate was made above it; the same thing also occurred in the course of the lower eschar, therefore another was made below it: these second applications entirely checked the progress of the erysipelas, and the woman ultimately did well. This was a very bad case, and entirely checked by the nitrate of silver. I have seen severe cases, over and over again, turn out well after the application of this remedy. This woman being in a very weak state, I supported her with beef-tea, and on the 23d, about a week after her admission, allowed her meat and porter. The most successful treatment that I have found in this disease, has been to put patients upon a nourishing diet, and often, even under this treatment, they have died, but more frequently under the antiphlogistic. Even local bleeding, by leeches, will sometimes produce this effect; therefore, in general, there is less danger in administering a good diet, in this affection, than the opposite treatment; for, if the inflammation be very active, powerful tonics will do good in this affection, whereas any other inflammation would be aggravated by them. I have seen cases treated by the antiphlogistic plan get well; again, I have seen the tonic plan adopted, and both kinds of cases have died. Therefore, as I said before, from the uncertainty of the treatment, in this affection of the head and face, I would always rather not attend them. Since, however, the treatment of the nitrate of silver has been practised, which was first introduced by Mr. Higginbottom, fewer cases have terminated fatally. There is another case of this disease in the hospital, of which I shall speak hereafter, in which the nitrate of silver was used, and checked the progress of the inflammation; but in this case, at first, the same occurred as happened in the one I have been speaking of; the erysipelas was checked at first, but afterwards spread through one spot, which was about a hair's breadth, left untouched by the nitrate of silver, but, on the second application, the eschar was made complete, and the progress of the inflammation entirely stopped.

I mentioned to you, in a former lecture, that blisters will produce the same effect, but they cannot always be depended upon. Yet, some strongly recommend them for limiting

the progress of this disease. The other case that I have alluded to is now in Jacob's Ward; the erysipelas has got quite well; the man, however, is labouring under rheumatism, for which he was admitted, and still staying in the hospital for this affection; there is not, at present, any danger of the disease returning, and I have no doubt, but that he will soon get rid of his other complaint, and be able to leave the hospital.

There are several cases, gentlemen, that were presented (discharged) last week, but our time will not permit me to speak of the whole of them to-day, therefore I will select one or two of the most interesting from them for the present lecture.

There is one of *asthma, accompanied with bronchitis*, which case will be interesting, as it will show you the necessity of discriminating your treatment, between the spasm of asthma without inflammation, and that which is partly kept up by inflammation of the bronchie, for it is impossible to give remedies a fair trial unless you are able to distinguish the difference. This man, aged 46, a labourer, was admitted into the hospital, Oct. 25th, with pain in the chest, cough, and dyspnoea; his breathing was more difficult when in the horizontal position, and frequently, in the night, was taken with sudden fits of coughing, accompanied by difficulty of breathing, which was so severe as nearly to suffocate him during the paroxysm. He complained also of pain in the left hypochondrium, and at times his abdomen swelled considerably, which again would decrease by his making a large quantity of water; after which, for three or four days together, he would sometimes make a very small quantity of urine, the swelling would return, and again disappear by his making a large quantity. I gave him, at first, one drachm of the tincture of lobelia inflata three times a day, and, when the paroxysm came on in the night, ordered him to take it every hour. The fit soon became relieved, after taking this medicine, but was only temporary, for as soon as the effect of the medicine went off, the fits would return as bad as ever. His breathing still continued difficult, though he had been taking the medicine for some days; there were now the sonorous and sibilous rattles heard in the chest, his pulse was quick, and he felt thirsty, therefore, it is clear, bronchitis was present, and the spasm, if not dependent upon it, was of course aggravated by this disease, and this being the case, temporary relief could only be expected from the medicine, without the aid of the antiphlogistic treatment. Therefore, no permanent effect being produced, and only slight temporary relief given, it clearly pointed out the necessity of subduing the inflammation. Consequently I had him cupped to sixteen ounces, and gave him a scruple of the powder of ipecacuanha every morning, to unload the bronchial tubes. On the 2nd of November, I thought it right to cup him again to sixteen ounces, still continuing the use of the tincture

of lobelia inflata. The paroxysms still continued, but not so violent as when he came in. The lobelia not making him sick, it was increased on the 9th to one drachm and a half three times a day; after taking a few doses of the medicine in this quantity, it made him sick about a quarter of an hour after taking each dose. The fits now came on as frequent as before, although the paroxysm did not last so long. If the fits depended solely on the spasm, I have not the least doubt, but that the tincture of lobelia would have checked them before this. This medicine, in its increased dose, having made him sick, when decreased had the same effect, which is a common circumstance with regard to other medicines. The drachm dose of this medicine having now made him vomit, it was again diminished to half a drachm every six hours; this dose also, when he took it oftener in the night, made him sick. On the 30th of November, it was found necessary again to bleed him, for the symptoms of bronchitis still remained, and he complained of tightness about his chest; the blood was bled and cupped. On the 4th of December, another pint of blood was drawn from his arm, which also was bled and cupped, the sonorous rattle still continued, therefore I was compelled to have recourse to mercury to subdue it. I gave him two grains of calomel night and morning, and, on the 7th, his mouth became sore, so, of course, the hydrargyri submuriatis was discontinued, and the sonorous rattle left him. On the 11th, he was attacked with diarrhoea, which was soon stopped by the infusion of catechu. Still I kept him under the treatment of the lobelia inflata. The paroxysms became less in frequency and violence, and, on the 13th of December, was so much better, in fact so well, that he did not wish to stay in the hospital any longer.

Now, of course, the tincture of lobelia inflata has no effect over inflammation; and unless the bronchitis is lessened, you must not expect it to do much good in the spasm which is kept up by that disease. When there is no inflammation present, this medicine is the best remedy I have ever observed in this affection. It is an Indian plant, and the planters there smoke it like tobacco: and in its effect it is very similar to it. We find some can bear the smoking of tobacco well, even to any extent, whilst others, if they even take a single whiff, it will make them sick: and I have known it, after smoking for a short time, produce faintness. So, likewise, will the lobelia make some sick, and others can bear it to any quantity. It has also a narcotic effect, similar to tobacco.

There are two modes of making this tincture, one is with spirit, the other with aether. The dose of that made with the spirit, which is most common, is half a drachm: but some can bear as much as a drachm of it; though, on an average, the former is as much as can generally be borne. Of the aetheral, seven

minims generally answer well; but this dose, in many people, if begun with, will cause sickness and headache. I have known this aetheral tincture act almost as a charm in arresting the paroxysm; and in ten or twenty minutes after taking it, the patient has been apparently restored to perfect health. This remedy certainly cannot be compared to aether, by itself, or any of the other antispasmodic remedies which are usually recommended. I certainly should be inclined to recommend this medicine in tetanus, hydrophobia, and other diseases of the nervous system; for I think it ought to be tried in those affections in which, at present, we cannot find any remedy to be depended upon for a cure. Some smoke this remedy for relief; and for the same thing some smoke stramonium, and find benefit from it; but I do not see any necessity for smoking it, when so small a quantity as five or seven minims answer the purpose. There are some individuals who cannot bear it in any quantity; and even one or two minims of the alcoholic tincture I have known produce sickness, so they cannot bear the least quantity of it.

The next case of interest that I discharged was one that was exceedingly relieved from the treatment adopted,—a case of *bronchitis, combined with diseased heart*, occurring in a man whom you will recollect was in the second bed on the right-hand side, going into William's Ward. William Adlam, aged 30, who said he had been suffering twelve months from this complaint. On listening with the stethoscope to the chest, the sonorous and sibilous rattles were heard on both sides of it. He complained also of cough, difficulty of breathing, and expectorated a quantity of frothy mucus. When he first came in, he could not lie down in consequence of the difficulty of respiration; his pulse was 88, hard and incompressible. On listening to the region of the heart, a loud double bellows sound was heard, at the moment of the contraction of the left ventricle, most distinctly at the sternum, which sound, in all probability, is caused by some disease of the aortic valves. A bellows sound may arise from hypertrophy of the heart, or from the blood not being obstructed in its attempt to return to the heart from the aorta. This double bellows sound I should imagine, from the length of time the disease has been standing, arose from some ill state of the valves: they have either become thickened, contracted, or perhaps altered in shape, so as not to afford perfect resistance to the blood in its effort to return, after the heart has been nearly excavated. The double bellows sound may also take place from two different valves, the one passing from the auricle to the left ventricle, the other from the left ventricle into the aorta; so that a distinct bellows sound is heard, both immediately after the contraction of the auricle and ventricle. But this double bellows sound heard in the case I have alluded to, arose from some disease in the aortic valves alone. The blood,

in the first place, meets with some obstruction as it passes from the left ventricle, and that quantity which is sent out is not wholly prevented from returning back through the opening again. The treatment I adopted in this case was, to keep him upon a spare diet, and, by means of emetics, unload the bronchial tubes. On the 20th, when admitted, I had him bled to twenty ounces, and gave him half a drachm of the ipecacuanha powder every morning, from which he found relief. On the 30th, I thought it right again to bleed him to twenty ounces. On the 2d of Nov., after taking the powder every morning, in consequence of its making him very sick, I altered it to every other morning, and again bled him to sixteen ounces. Under this treatment he so much improved, that he could now lie down with ease; his breathing, though still difficult, is much better, and does not admit of that wheezing sound, as on his admission; the bellows sound was still heard, though in a less degree than when he came in. I fear, from the length of time the disease has been standing, and by its not giving way to the antiphlogistic treatment, that there is some organic disease present; indeed, you may generally infer there is organic disease of the valves, if the bellows sound is constant; but should it only occur at intervals, or remain but a short time, the sound arises either from spasm or an inflammatory condition of the valves. If it be constant, and other symptoms are co-existing with it, your diagnosis would be, that it arose from organic disease. The bronchitis is generally caused by getting wet, or living in a damp situation. This man, who is suffering from the disease I am speaking of, is a labourer, and, from the nature of his employment, is obliged to be in the wet and cold; consequently he will be continually liable to inflammation of the chest, which will immediately aggravate the disease of the heart. Besides, from his laborious employment, he will be induced to take more of the fermented and distilled liquors than he ought to do, and of course this will tend to increase his complaint. This treatment is very effectual in checking, for a time, the progress of this disease; but it is not every one that can bear such active measures; then those that cannot will find the same benefit from moderate local bleeding. This man was of a strong constitution, and could bear the active treatment resorted to. His disease of the heart became lessened, and the bronchitis ceased; therefore the treatment was very satisfactory. Many that are affected in this way continue their labour, their living depending entirely upon it, which makes them of course unwilling to give it up, and they continue it till, in fact, they are unable to go on any longer. If they have not any disease accompanying this affection of the heart, they may continue it a long time without feeling much inconvenience. This man might continue without having a return of his bronchitis for a length of time,

and, provided he lived abstemiously, the affection of his heart might remain the same for years; but, on his taking cold, the bronchitis is liable to return. This will again aggravate the disease of the heart, and ultimately prove fatal, though, by the same remedies, the progress of the disease may frequently be checked.

*Hydrothorax.*—There is a case at present in the hospital to which I wish to draw your attention, for it is one you will not meet with every day; it is that of a woman who has fluid in the left cavity of the pleura, in Mary's Ward. In the first place, I will point out the difference between it and the case I have previously spoken about, which is in Jacob's Ward, a man who has air and water in the left side of the chest; the difference of symptoms between them are remarkably striking. In the case of pneumato-hydrothorax, upon percussion, a dull sound is emitted below, and a clear sound above, showing that water occupies the former situation, and air is situated in the latter. Upon auscultation, no respiration could be heard on that side of the chest, either above or below; and upon getting him to move his chest quickly backwards and forwards, a splashing sound was heard, of course indicating water in the pleura; you could also hear a sound, like striking gently a small piece of glass with a piece of metal, called the metallic tinkling. In the patient that was admitted last week, the symptoms differed upon striking the left side of the chest; below, a dead sound was heard, the same as in the other case, and upon percussion above, a dead sound also was heard; but in the man, you must recollect, a clear sound was emitted; therefore you see, there is not only water below, but also above, in this woman; and, in the other case, there was air above, and water below. Upon shaking this woman, no splashing sound will be heard. I did not try it myself in this case, because I was certain I should not find it; and any of you that like to try it will find this to be the case. Neither could any respiration be heard on account of the fluid being situated both above and below. You could hear no respiration in the other on the affected side; so in this instance they are so far the same, although not exactly from the same cause. Nor in this case either could you hear the metallic tinkling, or the oozing of fluid from the pleura to the bronchia; but, upon listening to the back part of the chest, and getting her to count, or speak about something, you will find the voice tremorous, harsh, and jerking, somewhat of a silvery sound, which always points out that water is situated in the pleura, and this sound is called *œgophony*, from its resemblance to that of a goat. This sound is not heard in front, on account of the quantity of fluid situated there; but in the back, where there is only a thin layer of fluid, and that rather high up, the sound can be heard. This sound always points out a moderate quantity of fluid situated in that part; so, for *œgophony* to be heard, the fluid must

only be effused to a certain extent ; if there is a great quantity of fluid, the sound is not heard, and if a very small quantity, the same thing occurs ; therefore it depends entirely upon a medium of fluid being effused. This disease may not always be dangerous, for although there be fluid effused, it may be absorbed again. When there is either a large quantity of air or fluid in the pleura, the heart frequently becomes affected. In this woman the fluid has pushed the heart from its situation to the right side, so that the pulsation of the heart is only felt on that side ; and frequently, when there is extensive effusion, the side in which the effusion has taken place, if measured, will be found to be larger than the other. I recollect a very violent case, occurring in a child, whose heart was removed to the right side, and the left had become considerably swollen from extensive effusion ; the fluid was let out, the left side decreased in size, and the heart went back to its natural situation ; the child ultimately got quite well. These cases point out to you the use of auscultation and percussion ; without them I could not have distinguished the case of pneumato-hydrothorax from plithisis ; neither could I have told the condition of this woman's chest ; and there is every probability, as she did not particularly complain of her chest, should not have been able to say whether there was any thing the matter with it or not ; for although she looked ill, she was admitted into the hospital for an enlarged abdomen-ascites, her countenance was very pallid, and there was a degree of anxiety about it ; pulse was small and quick, about 100 in a minute. She stated, nine months since she was confined, and a few days afterwards was obliged to walk several miles in the country, when she caught cold ; this was soon followed by ascites. Ever since that time has been troubled with slight pain in the left side of the chest ; she does not recollect having any acute pain in that part ; urine scanty, high coloured, not albuminous ; she cannot lie upon the right side. So, you perceive, there was not any symptoms in particular to be noticed without the assistance of the stethoscope and percussion. I should presume this woman had chronic inflammation of the pleura and peritoneum going on at the same time. The fluid may be effused slowly, and is a common circumstance ; but when it is thus effused, it is generally absorbed in a similar manner ; and the same thing takes place if effused from acute inflammation ; then it is quickly absorbed. Laennec first pointed out this method of ascertaining this disease, and, if the fluid collected in large quantities, he used to let it out ; and several cases are related by him which terminated successfully. It is quite clear then, from the symptoms, that this woman has water in the cavity of the pleura ; I therefore have given her, with the view of exciting absorption, one grain of calomel night and morning, at the same time ordered some diuretics ; one grain

of squills combined with one of digitalis, also half a drachm of the acetate of potass, and one drachm of the spirit of nitric æther in some camphor mixture, three times a day : she being exceedingly weak, I kept her upon a good diet. These medicines were commenced on the 7th of December, and on the 10th, when I saw her, they appeared to have begun to produce the desired effect. The œgophony was not so distinctly heard in the upper part of the back as before ; the fluid appeared evidently lessened in quantity, for, immediately under the clavicle, respiration was now just heard. The calomel made her mouth sore, and absorption I have no doubt is gradually taking place. When she came in, no respiration was heard under the clavicle, and now, as I have just said, it can be heard. When she came in, the œgophony was heard nearly the same both above and below ; if any thing, more distinctly in the former situation ; but now it is not so distinctly heard above as below, showing that it does not arise from any increase, but a decrease of fluid. I am almost fearful, though I have said it is not a dangerous disease, that she will not do well. Her appearance is very unhealthy, and she has been weakened from disease, both of the pleura and peritoneum, for nine months ; then, from the nature of the case, I should be inclined to give an unfavourable prognosis ; for I think there is a very great doubt of her recovery. Should the fluid increase, so that the œgophony cannot be heard, I shall then let Mr. Green see her, and consult as to the propriety of letting it out, and the safest manner of making the opening.

*Rheumatismus Syphiliticus.*—There is another case which I shall make a few remarks upon to-day, it is one of *syphilitic rheumatism*, in which the croton oil was used. The difference between the effects of these remedies and the tartar emetic upon the skin are very striking, one being so much milder than the other, and quite as effectual in removing of the disease. The tartar emetic will frequently cause sloughing, and, if extensively applied, is sometimes dangerous, always acting much more severe than the croton oil. The croton oil is quite as effectual in its action in removing disease as the tartar emetic, therefore I generally use the former remedy. By making two applications, that is, rubbing it on the skin night and morning, the eruption is generally produced ; but, should you wish to have the eruption produced quickly, I have no doubt by your repeating it at shorter intervals, the rash would be much quicker produced. I have never, however, used it in this way, though I have seen the rash produced from the first application. This rash causes the same extent of inflammation as the tartar emetic, though the inflammation appears milder, and is quicker produced. The vesicles that are produced do not contain a clear but a whitish fluid. It produces, when first applied, before the eruption is brought out, a smarting and

tingling sensation; the vesicles in the course of a day or two after their appearance subside, and the surrounding inflammation disappears. This eruption, like other diseases of the skin, will break out in other parts of the body. Nothing is more common than to see some cutaneous diseases disappear from one part of the body and break out in another; and sometimes, without leaving one part, will appear in another. The croton oil does not differ from the tartar emetic in producing irritation of the genitals. In using the tartar emetic, I have frequently seen, though the greatest care has been taken when it has been rubbed on the abdomen or legs, pustules produced on the scrotum, and I have even known the effect produced when a piece of leather has surrounded the part, and a bit cut out of it to expose the surface that required to be rubbed with it. I have no doubt, if the same precaution was taken with regard to the croton oil, it would be in some way absorbed by the skin, and the eruption appear on the genitals. I have never known this remedy excite purgation by its external application, neither do I believe that it would; and with regard to the tartar emetic, I have known it once, and only once, produce sickness after its external application. I have always the croton oil rubbed in until it produces an eruption, though seldom have recourse to it more than twice. This man, John Sampson, suffered severely from this affection; I gave him calomel until it affected his mouth, the pain still continuing severe and extending down the thighs, so that he could get no rest. I now gave him one grain of the extract of stramonium, night and morning; at this time had some croton oil rubbed down on the inside of his thighs, the eruption was produced, and the day after its appearance on the thighs it came out on the scrotum, causing great irritation of that organ. The pains now left his thighs, and after suffering for a long time before the application of this remedy, he went out perfectly well.

Here the learned Professor made a few remarks upon the introduction of this remedy as an external application, and gave the great credit to Dr. Short for introducing such a valuable remedy.

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*The Principles of Obstetric Medicine, in a Series of Systematic Dissertations on Midwifery and Diseases of Women and Children.* Illustrated by numerous Plates. By D. D. DAVIS, M.D., Professor of Midwifery in the University of London, &c. &c. Part XV. London, 1833. Taylor.

FIFTEEN Numbers of this admirable system of obstetrics are now published,

that is to say, nearly half the work; and, therefore, the most cautious of our brethren cannot possibly entertain a doubt of its completion. We have repeatedly spoken in high terms of the execution of this valuable publication; and feel gratified, that every succeeding fasciculus affords additional proof of the justness of our commendations. As a work of reference and authority, this must have a prominent place in every medical library. The distinguished author had acquired great fame as a private lecturer; his researches were the most extensive, his experience, as physician and obstetrician to the Maternity Institution, as well as in the most extensive private practice, eminently qualified him to arrange an operative system of midwifery, which justly entitled him to a preference for the high situation of Professor of Midwifery in the London University. The work before us is executed with ability and judgment, it abounds with practical information of inestimable value, it differs from all preceding systems and elementary productions. We subjoin an extract in proof of our statement.

*Of Leucorrhœa.*—Fluor albus, fluor vel fluxus muliebris, fluxus matricis, fluxio alba, profluvium muliebre, distillatio uteri, menses albi et menstrua alba, menorrhagia alba, alba purgamenta, uteri coryza et rheuma, uteri rheumatismus, blenorrhœa benigna, etc. Leucorrhœa is literally a white discharge: but the word has been used, in common with its numerous synonyms, to express great varieties of non-menstrual discharges from the female genitals.

“To understand the pathology of the several tissues, the diseased conditions of which are proximately the causes of leucorrhœa, it is obviously necessary we should have a correct notion of their structural character in their healthy state. Leucorrhœa is a morbid secretion of the complicated tissue which forms the internal surface continuously of the vagina, the uterus, and the Fallopian tubes. All mucous membranes have two surfaces, of

which one is free, villous, and unceasingly employed in the transudation of its proper mucus; whilst the other is adherent to a tissue of muscular fibres, which by their tonicity and irritability may be presumed to be well adapted to promote the actions of secretion and excretion. We also, almost in all cases, where free surfaces are continuous into muscles, are able to recognise an intermediate couch of a dense compact tissue, once deemed cellular, but more recently supposed to be fibrous and aponeurotic. This part of the structure is probably intended to give form and solidity to hollow organs. Moreover, it is not improbable, that this intermediate couch may act concurrently with the free surface in producing the rugæ, which in some parts are presented by mucous membranes: such, for example, are those which we observe in the vagina, especially in the anterior and inferior part of it, immediately behind the urethra; and such also are the valvulæ conniventes so remarkably apparent in the colon and the cæcum.

“The mucous membranes are composed of three distinct layers; viz. an epithelium, a papillary tissue, and a chorion. The former of these is only traceable at the orifices of cavities, and to a very short distance within them: whereas, deeply within their interior no examinations have hitherto satisfactorily demonstrated its existence. The papillary tissue is situated immediately beneath the epithelium; by reason of the extreme tenuity of which, where it may even be supposed to exist, it presents an organ of exquisite sensibility. The prominencies of these papillary bodies are especially apparent at the very commencement of cavities or passages; whereas, on advancing further into their interior, the surfaces are seen to present, in a greater degree, the proper character of a villous tissue. These papillæ are every where surrounded by a vascular net-work of great sensibility. The length and form of the papillary bodies present characteristic varieties in the mucous

membranes of different parts of the body.

“The chorion which forms the third tunic of mucous membranes, is not every where of the same thickness. At the palate, for example, it is very thick, as also it is in the parietes of the vagina; but it makes but a very slender contribution towards the formation of the parietes of the intestines, and of other excretory passages. It seems to form a tissue of much greater closeness of texture than the chorion of the common integument; inasmuch as it has never been known to admit of serous infiltrations through its substance; whereas, all the tunics of the skin, taken together, are not sufficient to resist such infiltrations.

“Within the substance of the chorion of mucous membranes, and especially imbedded in its external surface, there are great numbers of mucous glands, which unceasingly lubricate the free surface of these membranes with their appropriate mucous produce. These glands are easily seen within the mouth and on the bronchial surfaces; but they are very difficult to be traced in the bladder and within the cavity of the uterus. It is said that they are rendered very evident by maceration. Disease has the effect of very greatly increasing their volume as well as of morbidly altering their texture. The author recollects the case of an unmarried woman, aged about forty, who had been subject for many years to severe hysteric paroxysms, difficult menstruation, and profuse leucorrhœal discharges. She died of schirrus of the pylorus. On examining the state of the internal genitals, it was observed that the left ovary was greatly enlarged, and otherwise much diseased. The internal surface of the uterus was of a darkish red colour, and suffused with a thick lining of a purulent-looking fluid. The vagina was studded in many places with prominent and indurated glandular bodies, of which several were as large as peas, and two or three as large as hazelnuts. The crypts or openings of these



glands communicate freely with the surfaces which it is their special office to lubricate with the mucus which they unceasingly secrete. The term *mucus* is here used to represent the products of the entire class of muciparous glands; although in different parts of the body, and under different circumstances in the same parts, they greatly vary in their consistence. They may be said in general, when healthy, to be about the consistence of a dilute solution of gum in water. When recently secreted they are diaphanous and slightly viscid. By being allowed to lodge on the surfaces which they are intended to protect by their pellucid coating of delicate and natural varnish, they become, in some cases, progressively opaque, and acquire a manifest increase of consistence. When secreted, under circumstances of disease, they all sustain some changes of their natural and ordinary properties.

“When mucous membranes are for a long time exposed to the action of the atmosphere, they gradually lose the vivid tint of their sub-sanguineous redness of complexion, and become of a whitish-brown colour, not unlike that of the common integument. That fact may be particularly observed in cases of inversion of the rectum and the vagina of long standing; and it may be considered as presenting a striking analogy between the functions of the skin and those of the mucous membranes. These membranes are indebted for their red colour to the innumerable sanguiferous vessels which are distributed into their structure; and their colour increases in intensity in proportion as their functions are more actively performed. It is an observation of Bichat, that the mucous membranes of the infant become suddenly more vividly red immediately after birth; almost all of them, in consequence of that event, being called upon to perform new or additional duties. In common, indeed, with all living structures, their colour acquires an increase of intensity when

they become the subjects of inflammation. When the inflammation is active, their secretions are usually, on the onset of the attack, much diminished; a change, however, which is speedily afterwards followed by more than a corresponding increase of their quantity, and by great vitiation of their properties. But the dates, respectively, of the invasion and consecution of the several symptoms incident to the inflammation of mucous membranes, are governed by different laws, as they apply to different portions of this class of tissues. There is one great principle which is common to them all, viz., that in a comparatively short time, subsequently to the application of the cause, their respective secretions are greatly augmented and vitiated. Hence these important results of inflammations of mucous membranes have been assumed by pathologists as the basis on which they have formed their classifications in systems of nosology. Accordingly in all of them we find these principal phenomena represented by the very names which have been given to them in practical and systematic works. These designations have varied indeed slightly in shades of meaning, as they have been employed to express the affections of different organs; but the identity of the common and characteristic results of the diseases intended to be represented by them seems to have been recognised in all ages and countries. The idea of a catarrh or defluxion prevails through them all. Hence inflammations of the mucous membranes of the nose, trachea, bronchi, intestines, and genitals, have severally received the designations of coryza; catarrh of the trachea or croup; bronchial or pulmonary catarrh; dysentery and diarrhea; and gonorrhœa, blennorrhœa, and leucorrhœa. The same observation applies to almost all the different names at the head of the present article, by which the inflammation of the mucous membrane of the genital passages has been characterized by different writers. The

term inflammation, as applied to any given structure, may indeed represent many distinct varieties of morbid states; and it is accordingly a fact, that the mucous membranes of the female generative organs are subject to inflammatory affections of many different kinds; and moreover, when thus variously affected, they are found, as might be expected, to furnish morbid discharges of corresponding diversities of sensible properties. Hippocrates, in his second book on the diseases of women, describes clearly as many as ten different varieties of morbid discharges from the uterus. Other authors, among whom are to be found some of the principal nosologists and pathologists of modern times, have reduced their number to five, six, and seven, according to the opinions which they have respectively entertained of their several causes. The most common variety of these discharges is that which has received the ordinary designation of constitutional leucorrhœa.

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#### ESCULAPIAN REFLECTIONS.

##### No. II.

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WE are not naturally eloquent, but when we traverse scenes of by-gone days, our eloquence waxes warm, and we hardly know where to stop. It is like an old, broken-down hunter, ordinarily insensible to the palpable hints of progression of the whip, that appears to gain the vigour and spirit of adolescence when he hears the sound of the bugle, and the cry of the huntsman and the hounds, and, to the astonishment of his not more adipose master, outstrips the wind, and, like it, bids defiance to the agricultural barriers of hedges and ditches.

If our remarks \* were to appear to

\* It will be seen, from the conclusion of our last "Reflections," that we did not intend to extend this subject; but "second thoughts," which are said always to be the best, dictated our present proceeding, which we hope will be approved of. It is our intention to finish

the world within the limits of a thick octavo, we know not, tyro, what extent of advice we would give thee. We would dwell upon the horrors of dissipation; we would declaim, "rotundo ore," against indolence and indecision; we would rouse thee from thy lethargy at six o'clock in the morning, and we would wrap thee in thy swaddling clothes, and lay thee in the arms of gentle Morpheus at two o'clock on the following morning again; we would even deign to direct thy financial matters; we would condemn extravagance; we would see thee *domesticated* at twelve shillings per week; and we would close the doors of "chop-houses" for ever in thy face. Yes, tyro! we warn thee. Be not duped, when searching for a residence, by the practice, too general in London, of making the preparation of a dinner an exception to the terms of a lodging: the evils of which we will now proceed to detail to thee. Students, who dine from home, on the one hand, from the mistaken idea that it is cheaper, and, on the other, because their landladies refuse to cook for them at home, instead of turning their backs to the fragments of "the loaves and fishes," with a stomach full of wholesome plain food, with their faces directed towards the fire, with a foot on each *hob*, with the words of John Bell's "System of Anatomy" impinging upon their retinæ, and two hours' examination at the Apothecaries' Hall upon their recollections, they lounge over the greasy tables of one of the places in question, with one eye closed by the soporific finger of Morpheus, and the other intently fixed upon the vulgar columns of "Bell's Life in London," until their glass of punch and reason have simultaneously evaporated, when they "drag a lengthening chain," with every step, to the pit of the theatre of Drury-Lane, or Covent-Garden, or else they mix, what spark of reason there re-

the subject in our next. These "Reflections" ought to have been forwarded last week, but indisposition pleads our forgiveness.

mains, with the disgusting fumes of a cigar divan, or sacrifice six months' happiness at the shrine of a billiard table ; so, by degrees, wandering from the path of propriety to the withering eminence of vice, or we would, sorrowing, call it *medical studentism*. This is a sad picture, tyro, but no less true :

“ — and pity 'tis, 'tis true.”

We, who are but a student ourself, are sorry to be the artist of so sad a picture ; but we cannot blind ourself to the follies into which medical students are notorious for running, neither would we wish to blind thee, tyro, to the awful consequences of the practice of such follies. No ! we have purchased experience at a dear rate, and it shall now stand as a beacon, between the rock of Scylla and the whirlpool of Charybdis, to guide those coming after us safely out of danger : if, then, they put their candles under a bushel, and sink with the fragments of a shattered bark, God help them, for *we* cannot. The shipwrecked survivors will live to see the day of remorse, when retrospection, instead of being a bright vista of happiness, will be darkness, darkness interminable.

But to proceed. The regulations of the Apothecaries' Hall have prescribed for the student's first attendance, one course of *materia medica*, anatomy and physiology, and chemistry, previous to his attendance upon other lectures. Moreover, the student must devote two years to his attendance upon lectures and hospital practice.

As his avowed monitor, we would grieve to be found deficient in the very important task which we have imposed upon ourself ; and if, indeed, we have appeared to dwell upon topics frivolous in the eyes of many, we have done so with good intentions, with a conviction, that the advice will be a lamp in the hands of the tyro, which will show him his way into some of the darker corners of this vast metropolis, and then, what is essentially more beneficial to him, that lamp will show him

his way out of those corners again, expanding its flickering flame, fed by the oil of experience. Yes ! we are convinced of the benefit of advice, on such apparently unimportant points, from painful and personal experience ; so that we would be sorry for the tyro to be one moment in the dark, when he can borrow light from us, a loan (as the immortal Cicero has represented the obscure Ennius to have said) by which we can lose nothing.

Nothing can be more important than an unremitting and undivided attention to the sciences of chemistry and anatomy, at the period of the young student's outset upon his pilgrimage into the dark and winding valleys of his profession. That attention should not slacken at the end of the first course, in consequence of its demanded presence upon other branches of his studies, because it is so prescribed by the Medes and Persians in Union-street. That is a bad gardener, who, to the neglect of the tender roots of the young shrub, snips and cuts, and trains its branches ; and he is a wise one, who manures the roots, and passively smiles at the informal luxuriance of the branches, for he will see his tree flourishing in magnificence, while the other man will mournfully gaze and wonder on the tardy progress of *his* tree until he sees it droop and die, a sacrifice to the decaying touch of an angry nature ; which parable, being interpreted, means, that anatomy and chemistry are the roots of the tree of medical science, and that they should be well cultivated, so that they may more perfectly and more easily bring forth their branches. There should exist, at this period, no disposition to gallop round the wards, with the surgeons and physicians of the hospital, for such a process now will possess disadvantages, equal in magnitude to the advantages derivable from a strict attention to the practice of the hospital hereafter, and in proper season.

Chemistry should be prosecuted by a strict attendance upon lectures,

blended with the firm determination to profit by the instruction conveyed in them, by attentive reading, and by manipulation, as far as it is practicable. Anatomy should be pursued by dissections principally, commenced as soon after a perfect knowledge of the bones is acquired as possible ;—contrary, we know, to the advice of many, based upon what reasoning, we are too obtuse in perception to understand. Haller, we think, is of opinion, that twenty years' dissection is alone able to make an anatomist. If Haller has not erred, is it possible, we would ask, for a medical student, who can devote, at most, but a fifth part of that time to it, to begin *his* studies too soon? If we said anatomy was the foundation of the great superstructure of medicine, we should be repeating, not only what we have already stated ourself, out what great men have said before us.—“Must I divide this nerve, this vein, this muscle?” we have asked, in the perplexity of an initiation into the operations of the dissecting rooms. “Why, really I don't know,” our astute instructor has replied; “what good can *such* minuteness ever do you in *practice*?” Such has been the reply which we have received, and oh, tyro! thou wilt find it to suit thy disposition much more at that period, than advice, which would involve thee into the necessity of *learning*, and of submitting thy olfactories to the nauseous irritation of animal decomposition two hours *per diem* longer. But, we say, beware! a declamation which we would stamp with the seal of experience. And what has been our experience on this subject? Why, we have had to correct the habit acquired by such advice, of slurring our dissections, or of performing them with such carelessness, that we could trace in them neither the origin nor the destination of the parts. We have, consequently, had to spend subsequent time in the pursuit of anatomy, to the sacrifice of our hospital practice. Oh, tyro! it pleases our organ of benevolence to

hold our own follies up to the light, that thou mayest see, through their transparency, the laughing devil that they attempt to hide; and learn from them a lesson—a sacred lesson—a lesson which thou shouldst carry to Charing Cross, that Mr. Mackintosh may cover it with his excellent patent cloth, that it may be proof even against the waters of Lethe! We have quoted these words once before in this Journal, but, being so appropriate, we are tempted to conclude this article with them.

“*Horæ quidem cedunt,*” says Cicero, “*et dies, et menses, et anni: nec præteritum tempus umquam revertitur, nec quid sequatur sciri potest.\**”

A PUPIL.

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THE

London Medical & Surgical Journal.

Saturday, January 26, 1833.

MEDICAL REFORM.

IN our last, we noticed some of the abuses in the present mode of management of the Royal College of Physicians, with the ardent hope that such changes would be speedily made as to render this Institution worthy of the age and country in which we live. We had the courage to express our sentiments with freedom and independence, our motives being to forward the real interests of an establishment which would be entitled to veneration and support if managed upon liberal principles. We are not levellers; but should deplore the extinction of a society which, with its numerous imperfections, has strong claims to respect. In making this statement, we do not retract a single sentence in our former remarks, but

\* De Senectute, cap. xix.

we give to Cæsar the things that belong to Cæsar. Reform, however, must be granted to save the College from destruction. Let the members at large — Fellows and Licentiates — have equal privileges; let all silly and foolish distinctions cease; let the censors be men of weight and experience; let the examinations of regular graduates be abolished, as in the Edinburgh College of Physicians, and then will every physician in the metropolis, and in Ireland and Scotland, respect and support the College. But if Parliament commence reform, the laws relating to these branches of the profession will be assimilated, and regular graduates in physic, and diplomatists in surgery and pharmacy, in this nation, will enjoy equal rights and privileges.

It was our intention to notice the abuses in the Royal College of Surgeons in this number; but press of matter obliges us to defer the subject until our next.

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#### ADDRESS TO OUR READERS.

ON concluding our second volume, we avail ourselves of an established custom, to take a retrospective view of our labours during the last year. We commenced this Journal on the broad principles of liberality and independence. We were determined to avoid the Scylla and Charybdis on which our predecessors had been wrecked. We proclaimed ourselves opponents to faction and to party, while a zealous desire to benefit the whole profession was our object. We

promised to maintain and uphold the dignity of the faculty, and to expose to scorn empirics, and all abuses in our profession, and this we have fearlessly done, and shall continue to do, notwithstanding the hostility of all medical corporations, hospital monopolists, heads of large medical schools, uneducated chemists, druggists, and all illegitimate pretenders to medical knowledge—notwithstanding even the fear of our wise law of libel, which, contrary to the dictates of the Divine law, punishes a man for speaking or declaring the truth. We laugh at the pigmy efforts of such men, when opposed to the liberty of the press—that engine that sways the welfare of nations, and awes every member of society, from the monarch on his throne to his humblest subject. It has been worked by us to expose abuses in the profession, as prejudicial to the interests of the whole of the faculty and of mankind; and to denounce fraudulent, rash, and desperate quackery, though supported and upheld by a few hireling newspapers and obscure ephemeral periodicals, as superior to the dignified and transcendent science of medicine. No, we are not to be intimidated nor diverted from our determination of improving the condition of the faculty and of suffering humanity. Here we renew our promises of exposing abuses in every department of the profession, and of assailing all the Proteian forms of quackery.

The next claim we place before our readers is, the impartiality we have displayed in conducting the

different departments of this periodical. Our labours have been great, but fairly appreciated. Those only conversant with journalism can estimate them properly. We struck out a new path for ourselves; we differed from all our predecessors. We procured the best national and foreign assistance; medicine was our theme, and we illustrated it from all sources. Our materials were supplied from all parts of the world; we cared not where we found them. We comprised British and foreign medicine. We were the first who published English, Irish, and French lectures in a London Medical Journal. Our contemporaries have followed our example; and we feel much pride in noticing some of them giving French lectures. It was well observed of old—“*fas est ab hoste doceri,*” and “*nunquam sera est ad bonos mores via.*”

When we commenced our career, twelve short months ago, there was a system of reviewing followed by some of our contemporaries, the most unfair and unjust that could be imagined. If the author belonged to one party, he was abused by the other; the merit or value of his work was depreciated.

Having the gratification of belonging to no particular party, and caring nothing for any, we were at liberty to speak of books as we found them. We awarded praise or censure where it was deserved. Our contemporaries have strictly followed our example, and no longer abuse a work, because the author is not a monopolist or a radical. For ourselves, we have a

fixed rule, which we shall ever follow, and it is this,—we care not who the author may be, we shall praise or censure his production as it deserves. We cannot, agreeably to our principles, abuse a work on the grounds that its author belongs to this or that branch of the profession.

Another claim we have on the medical profession of the United Kingdom is, our conduct on the cholera question. We alone were the first who advocated the non-contagiousness of cholera, when there was not another Medical Journal in England, Ireland, or Scotland, that ventured to support that side of the question. We had the high gratification of observing every Journal in this empire afterwards advocating our side. We guided the public press, and led it to expose the stupidity and ominous croakings of the Boards of Health; and here “we have done the state some service, and they know it.” We finally witnessed the whole profession in this country (unless the creatures of the Boards of Health), and the faculty in France, as soon as cholera was observed there, of our opinion; and even that immaculate and disinterested junta, the Central Board of Health, arrived at our conclusion!

A few words more, and we have done. We have now to observe, in conclusion, that we procured the most efficient aid in executing the various departments of this Journal. We need only refer to the lectures of Professors Cooper, Elliotson, Graves, Magendie, and Dupuytren, corrected by those distinguished Professors, and to many others of equal value with which we have been favoured. We offer our labours at two-thirds of the expense of our contemporaries'. We challenge

a comparison, and if our readers do not acknowledge that we afford them unequalled advantages, and on the lowest terms, we are sadly mistaken. We act in unison with the spirit of the age; we think there should be cheap medicine as well as cheap literature of all descriptions. If we do not give value for six-and-twenty shillings per annum, we declare the press has no claim on an enlightened profession, such as the medical. Knowledge is power; information is the only certain road to eminence in the medical profession.

We have procured additional talent in all our departments, and are confident, that we shall be able to present to the medical public advantages afforded by no other periodical.

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#### ROYAL INFIRMARY, EDINBURGH.

##### VACANCY IN THE OFFICE OF PHYSICIAN. PROPOSAL OF DR. MACKINTOSH.

THE death of Dr. James C. Gregory has occasioned a vacancy in the Medical Staff of the Royal Infirmary. On Saturday, the 5th instant a meeting was held at Mr Fergusson's Lecture Room, Edinburgh, to consider the propriety of requesting Dr. Mackintosh to become a candidate for the office in question. The theatre was completely filled; and, although the expression of feeling was sometimes strong, the proceedings were conducted in a very orderly manner. Dr. Rogers having been called to the chair, the following resolutions were then successively proposed and adopted:—

1. Moved by Mr. Harrison, seconded by Mr. Clarke,—“That the situation of Physician to the Royal Infirmary having become vacant, in consequence of the death of Dr. James Gregory, this meeting is deeply sensible of the advantages that would accrue to the students of medicine, were that vacancy supplied by a gentleman accustomed to instruct in that branch of medical science, particularly connected with hospital attendance.”

2. Moved by Mr. Tait, seconded

by Mr. Walford,—“That in the opinion of this meeting, the advantages contemplated in the first resolution would be most eminently secured by the appointment to the vacant situation of Dr Mackintosh; who from his success as a Lecturer on the Practice of Physic, his long experience as a physician, and his unwearied zeal in pathological investigations, is highly qualified for such an office”

3. Moved by Mr. Johnson, seconded by Mr Morris,—“That this meeting appoint a Committee, to transmit to Dr. Mackintosh these resolutions, together with a letter, soliciting him to become a candidate for the vacant situation; that this letter lie for signature in this room after the meeting; and that copies be left, for the same purpose, till six o'clock on Monday, at Messrs. Maclachlan and Stewart's, and at Mr. Lizar's Anatomical Rooms.”

4. Moved by Mr. Mackay, seconded by Mr. Miln,—“That the following gentlemen form the committee: the Chairman, Mr. Johnson, Mr. Harrison, Mr. Tait, and Mr. Walford.”

Thanks having been voted to Mr. Fergusson and the Chairman, the meeting separated.

A copy of the foregoing resolutions, together with the following letter, with two hundred and fifty signatures attached, were afterwards transmitted to Dr. Mackintosh:—

“Deeply lamenting the loss which the Medical School of Edinburgh has sustained, in the death of Dr. James Gregory, who, by his zeal in pathological investigation, gave a bright promise of future excellence; and considering that the interests of that school, and the benefit of its pupils, are most intimately connected with the appointment, to the vacant situation, of a gentleman indefatigable in the acquisition of knowledge, and distinguished for his talent in imparting it; and believing that these requisites are fulfilled by yourself, in a very eminent degree, we, the undersigned, beg leave respectfully to entreat, that you will offer yourself as a candidate for the office in question.”

## ANOMALOUS NERVOUS AFFECTION.

*To the Editors of the London Medical and Surgical Journal.*

GENTLEMEN,

WHEN cases of a novel description occur in the practice of medical men, it appears to be a custom among them to make such cases known to their professional brethren, through the medium of some periodical, whether weekly or otherwise. Observing, in the 45th number of your excellent publication, a case headed "Wonderful Nervous Affection," I have been induced to transmit to you one which, "though there was nothing wonderful or strange in it," I think was interesting, and which occurred to me rather more than a year since. Should you think it worthy relation, I shall feel obliged by its insertion.

The patient, James Ireland, a weak-looking boy, about twelve years of age, though previously to the period of attack enjoying tolerably good health, went to school as usual one morning, and was in the act of saying his lesson, when he found himself incapable of uttering a word. He experienced no pain or other inconvenience at the time, and was perfectly sensible. In consequence of his being unable to speak, he was sent home. The paroxysm (for so I may term it) lasted about an hour, and he was then able to join his companions as usual. In the evening he had another slight attack, which only lasted about five minutes. On the following morning, he had another slight one, which soon ceased, and in the evening one, more severe than the rest, in consequence of which his parents became alarmed, and I was sent for. On my arrival, he was just recovering, and appearing to suffer much from alarm. He was then, for the first time, complaining of great pain in the head, with a full jerking pulse, tongue slightly coated with a brownish fur, and bowels constipated. His appetite had not failed in the slightest degree. I mentioned my intention of abstracting blood from the arm, and, during the mother's

absence to procure the requisites, I observed great distress in his countenance, and asking him if he was afraid to be bled, he said "no, but it is coming again," and, in the course of a minute, I witnessed the attack. It appeared as if he wished to speak, but could say nothing further than "bow-wow-wow," which were so rapidly repeated, that it appeared, by the motion of his lips, as if it was a person in a most violent shivering fit of ague: at the same time his eyes were rapidly rolling about. He recovered with the escape of a few tears, and was then able to say he felt better. I bled him to twelve ounces, gave him an emetic of ipecacuanha and tartarized antimony, and followed it up by a good dose of calomel and free purgation. On the following day he was free from pain, his tongue was cleaner, and pulse improved, but still the attacks continued. I applied a blister to the nape of the neck, and gave calomel and antispasmodics every four hours. I continued this treatment till the gums were slightly affected; but though the paroxysms still remained, their severity was lessened. I gave the quinine in small doses, but without effect; and I then determined on trying large doses of camphor, combined with Dover's powder, and four grains of the quinine every six hours. The result was, that after the first dose he had not a single attack. I deemed it necessary, to prevent a return, to continue the medicines for two days after, but reduced the dose considerably. All that was further necessary was to regulate the bowels, which had a tendency to constipation. It had a curious appearance to see him, during the attacks, sitting on a stool before a clock, with his elbows on his knees, and hands supporting his head, whilst he was counting the minutes during each paroxysm; for, as he said, he liked to know how long each fit lasted.

I remain, gentlemen,

Your obedient servant,

HENRY GREATWOOD, M.R.C.S.  
Paington, Devon, Jan. 19, 1833.



## DEFENCE OF CHEMISTS.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

SINCE you have thought proper to dismiss me in the very summary manner you have, instead of publishing my letter in your Journal, which, in common justice, you ought to have done, as it is not fair, now that you have so unwarrantably attacked us, that you should give to the world *ex parte statements only*. I repeat, such conduct is not fair; and I shall, in consequence, take an early opportunity of laying a full statement of the facts before the public in some of the *liberal papers*, in order that they may be able to read, judge, and decide, whether or not we have been most shamefully, unjustifiably, and most illiberally treated by you.

In reference to your Leader of last week, to which you directed my attention, I beg to say that I have read it, but the *principle* does not apply to me, for I have always been fully impressed with the importance of compounding medicines with genuine drugs and chemicals, as much for the sake of my own credit as for the welfare of the patient. There are, no doubt, those to be found who are so base and unprincipled as, not merely to adulterate drugs for the sake of gain;—such are to be found even amongst your own fraternity. It is a well-known fact, that in the metropolis of Great Britain there are physicians—ay, physicians, too—who, for filthy lucre, actually stoop so far beneath their high-born dignity, as to accept an annual paltry stipend from the very chemist and druggist you so much despise, in consideration of his strictly enjoining all his patients to take their prescriptions to the said druggist to have them compounded, adding (very charitably), “you can’t obtain the medicine so genuine elsewhere.”

Out upon such canting hypocrisy!—one of the greatest medical hum-

bugs of this canting age!—expose it as well as other abuses;—don’t shrink, as public journalists, though, as the vulgar phrase is, “*the shoe pinches.*” Also, call upon all physicians and surgeons to write their prescriptions in a fair and intelligible manner, not in the slovenly and affected way they do; it is a disgrace to them!

I have thus far, gentlemen, addressed myself to you in defence of my own conduct and business, and pointed out some glaring evils, which, as well as those you have described, call loudly for reform. If my brethren do not also repel indignantly, yet firmly and respectfully, as I have done, your unfair statements, then shall I conclude they have thought it more consistent with your demerits, to treat your fulminations with contempt; and, on the other hand, unless, in your future numbers, you do touch upon, with as unsparing a hand as before, in fully exposing the malpractices and medical abuses referred to, then shall I cry you up with shame, as canting hypocrites, not professing liberal principles,—as a narrow-minded, bigoted set, whose object is to raise your own reputation by endeavouring to annihilate a highly respectable body of tradesmen;—to increase your wealth, by pandering to the taste and wishes of your envious fraternity, who feel so mulcted at our success.

I am, gentlemen,

Yours, unflinchingly,

JUSTUS.

London, Jan. 15, 1833.

## WESTMINSTER MEDICAL SOCIETY.

Saturday, January 19, 1833.

THE following instructive paper was read by Dr. King, and excited great attention and interest:—

Until within the last few years, polypi of the uterus were almost always treated by ligature, in every country, and up to the present day this plan is generally preferred in England. It

must not be forgotten, however, that Fabricius de Aquapendente, was in the habit of removing them by incision, a method first pointed out, I believe, by *Ætius*. Fabricius used to divide the pedicle with a kind of cutting forceps, and we find no good reasons alleged why this process was abandoned. I know it has been stated, over and over again, that it was frequently followed by profuse and dangerous hæmorrhage; but, from recent observations relative to the nature of these tumours, and more especially from the results of Baron Dupuytren's practice, there is every reason to believe it was open to some more valid objection. What that more valid objection was, cannot positively be stated; but, I could venture to surmise, before entering upon the question, whether the danger of hæmorrhage is a well-founded objection, that it arose from the difficulty of performing incision, of using a cutting instrument without wounding the vagina or uterus. We are told, indeed, that Fabricius, in operating, carried the cutting forceps up to the tumour upon his finger, previously passed into the vagina, and, embracing its stalk with the blades, cut it through; and this is almost all we hear stated about it. Now, it is very easy to talk of cutting off a polypus, but not quite so easy to perform such an operation; but, had this point of surgery met with the consideration its importance deserves, and suitable means been devised for using cutting instruments with safety, I am inclined to think the process of operating by incision would not have been so long suspended. To one of the boldest of the French surgeons, Baron Dupuytren, we are, I believe, indebted for its revival. He was the first to consider the objection about hæmorrhage as chimerical, and to see that the real one was the danger of wounding the vagina or uterus with the knife, or cutting instrument; and having witnessed, on the other hand, the irksomeness and inconvenience of applying the ligature, he was induced to try another plan. Well knowing

the danger of cutting at the bottom of the vagina, and seeing no means of completely obviating it, he bethought himself of bringing the disease into view, by drawing the uterus down to the external orifice of the vagina; he conceived, in fact, that by seizing the tumour with a strong hook forceps, he might draw it, uterus and all, within sight; or, at least, so near the orifice of the vagina, as to be able to detach it with a pair of curved scissors. In this he succeeded perfectly, and since then, I should think, he must have operated upon nearly a hundred cases, and almost without a single accident of any kind. In only one case was he obliged to have recourse to active measures to arrest the hæmorrhage—a most remarkable fact, which I hope the Society will bear in mind. In several of these I had the advantage of assisting him and witnessing the result, and some few cases operated on myself were equally fortunate: as to hæmorrhage, we scarcely ever anticipated such a thing. I confess, however, this plan is not entirely exempt from inconvenience of another kind. Sometimes it is impossible to draw the uterus down; often the attempt is attended with great pain, and I believe there are instances of its being followed by serious peritonitis. I have seen, besides, some polypi yield to the pressure of the hooks, so that portions of it are torn away, and then the stalk of the tumour, being too small and too far off to be laid hold of, remains to reproduce the disease. Some, perhaps, would consider this no objection at all, and advise seizing the neck of the womb with the hook-forceps, and drawing it down as *Lisfranc* does when he removes it in a cancerous or ulcerated state; but surely, inflicting an injury of this kind would scarcely be justifiable in a case of polypus; for an injury indubitably it is, to fix hooks into the neck of a sound uterus. A further objection may be urged against this method, namely, that it requires that the patient should be placed on her back, and exposed in a manner to

which a strong aversion must naturally be felt. These considerations have induced me to recommend a plan which, in a case of great difficulty, I lately employed with success. The tumour occupied the interior of the neck of the uterus, being attached by a stalk about three-quarters of an inch in diameter, rather to the left of its anterior wall, a few lines beyond the orifice, or os tincæ, which was sufficiently open to allow the finger to be passed round the pedicle. As is generally observed, it caused perpetual bleeding, great debility, and pain in the back and sacral region; but there was this remarkable peculiarity in it, which will explain the difficulty experienced by one of the surgeons, whom the patient consulted, in forming a precise diagnosis, namely, that at certain periods a good deal of blood was effused at the lower part, apparently under its membranes. This blood gave the tumour, for the time it remained, a considerable increase of volume, making it appear, to any one who examined it then, as large as a middle-sized pear; but, all at once, coagula would come away, affording considerable relief to the pain in the back, and then the polypus would assume the volume, and somewhat the shape, of a large chestnut. It was in the latter state when I first examined it, just after an unsuccessful attempt had been made to remove it. As the account given of it by the operator did not coincide with mine, I requested to meet him in consultation. We met, I think, three or four days after his operation, I declaring the tumour to be not bigger than the end of my thumb, and my colleague stating it to be the size of a pear.

I desired he would examine the tumour again; he did so, and immediately declared that my opinion was correct. It then became a question, whether or not he should recommence the operation, which, previous to our consultation, he had fully resolved on; and we agreed that no operation should be attempted: my colleague

thinking the remains of the tumour, as he called it, might not cause inconvenience; I, on the contrary, believing the main and solid part of the polypus still to exist; but that it could not easily be laid hold of by ligature or otherwise. My reason for thinking the removal impracticable was founded upon the oblique and moveable position of the polypus; it could just be reached by the end of the finger per vaginam, and seemed to slip into the cavity of the uterus, the moment any attempt was made to carry the finger beyond its attachment. This circumstance, which operators who have written on the subject seem to have overlooked, constituted the real difficulty, and rendered the result of any operation doubtful. For several months, I confess, appearances seemed to favour the result which my colleague had led the patient to anticipate; and, concealing my own apprehensions, I took particular care not to disturb the hope she entertained. At night, however, the symptoms returned, and the patient consulted, of her own accord, a practitioner of very great experience in disorders of the uterine system, who, as soon as he examined per vaginam, proposed an operation by ligature. She then expressed a wish to have my opinion again, and I was directed to speak to this gentleman on the subject. I intimated to him the difficulty I thought he must experience in applying a ligature, if the tumour had not increased since my last examination; he agreed with me as to its size, but apprehended no difficulty whatever in the operation, in which he invited me to assist him. The attempt was made, but the operator, after long and arduous efforts, found it impossible to apply the ligature. He then had recourse to a plan similar to that which is the chief object of this paper to recommend. He employed the nail of his fingers as a knife, and succeeded in removing the polypus piece by piece, pretty cleanly. It was of a gray gelatinous tissue, and seemed to owe its firmness

to the cellular membrane surrounding it. We were right about its volume and form, in which it very much resembled a chestnut.

The patient necessarily suffered a great deal from the slow and difficult process of cutting through such a tumour with the nail, and from the force it was necessary to use. No unpleasant consequences, however, followed, and in three or four days she was comparatively well. All along we had, every one of us, suspected that the uterus itself was enlarged, and consequently the disorder might return. Unfortunately, the symptoms re-appeared after a few months, and I was again consulted. Upon examination this time, I found the tumour was about the size of a pear, and filling the vagina, as the practitioner, who first operated, had described it; but knowing what had happened before, I clearly discovered the lower end, and greater part of it, to be formed of coagulated blood. As the symptoms seemed urgent, I was requested to remove it; and, knowing the difficulty my very able and eminent colleagues had experienced before me, I resolved to operate by incision, if I could devise the means of performing it. It was clear that the pain and tediousness of removing it with the finger nail depended on the bluntness of the instrument, and that owing to its size and particular position a knife or scissors would expose to the danger of wounding the vagina or uterus. It seemed to me, then, if I could substitute for the finger-nail an artificial one, made of steel, the polypus might be speedily and safely removed. The instrument I had constructed (which you see here) is composed of two parts, an open thimble and a sliding blade.

The thimble, which has a groove in its upper part, fits unto the finger. The blade is seven inches long, half an inch wide, and shaped at one end into a broad-shouldered lancet; this slides to and fro in the groove of the thimble, close upon the finger-nail, and, by means of a spring, can be

stopped there at different points, so that the lancet may be protruded more or less beyond the end of the finger. In introducing the instrument, the lancet is to be fixed back till the end of the finger has reached the stalk of the polypus and discerned the part to be cut through; it is then to be pushed forward by an assistant, or the operator's other hand, to the degree of projection required, and used in the manner one would employ to excise the tumour. In this way I succeeded in removing the polypus in a much shorter time, and with much less pain to the patient, than was occasioned by the prior operation. It was smaller and more yielding than the first tumours; and from the manner in which it slipped from the finger, I do not see how it could have been removed but by the instrument employed. I cauterized that part of the uterus to which it was attached with the nitrate of silver, fixed in a long quill, which I directed to the spot upon my finger. The bowels were kept regular, and warm aqueous injections thrown into the vagina twice every day. On the fourth day I examined per vaginam, and not a vestige of the polypus remained. The os tincæ was closed, and the uterus appeared to be in a more healthy state than I had ever before found it.

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#### ROYAL ASIATIC SOCIETY.

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THE meeting of this important Institution was rendered, on Saturday last, of more than usual interest, by the presence of the celebrated Clot Bey, who was introduced to the Society by the President, Sir Alexander Johnstone, with a very animated address. He pointed out the circumstances under which the Pacha of Egypt had obtained his aid, in founding and bringing to perfection a school of medicine at Cairo. He dwelt upon the thorough knowledge of the human mind which Clot Bey displayed, in overcoming the preju-

dices which naturally existed against what were supposed to be innovations. He pointed out the means by which he had obtained the most decided influence over the principal men there, and the beneficial influence which, in consequence, he had been enabled to exert for the improvement and advancement of society.

The learned foreigner replied in French, in a speech of considerable merit. He accepted, with great pleasure, the testimony of respect which had been offered to him. He felt delighted to receive such marks of approbation from the great rival in science and in literature of his native land. From France, he felt, that as her offspring, he had some right to expect a kind reception, but it was indeed most flattering to find that any action that he had had an opportunity of performing could be so highly estimated by a foreign nation; but when he looked around London, and saw the glorious institutions which adorned it, he could not feel surprised that such a nation would hail the arrival of one anxious to do his duty to mankind, with kindness and hospitality.

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## Hospital Reports.

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### ST. THOMAS'S HOSPITAL.

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#### DELIRIUM TREMENS.

JONATHAN CROWTHER, aged 49, a shoemaker, admitted, under the care of Dr. Elliotson, into William's Ward. From his own account, he has been a great drunkard for many years, and during the last years he has taken considerably more of spirits than usual. Now, for some days, he says he has felt very low, and, about a week ago, was taken with violent tremors, preceded by severe headache. At the time of his admission the trembling continued, his hands and arms being in a continued state

of agitation, eyes, at this time, suffused; pupils very much contracted; dimness of sight; great anxiety of countenance; voice appears weaker than natural; tongue tremulous, and coated with fur; pulse 100, but cannot be felt with any degree of certainty, owing to the trembling state of the hands.

Dr. Elliotson saw him the day after his admission, and ordered

*R opii, gr. iij. oct. quæque horâ.*

Nine o'clock A.M. The opium was given about eleven o'clock last evening; he slept well during the night, and did not talk so much or so loudly as he did the previous night; tremor rather less, but at present he appears to be labouring under the influence of opium. If asked questions, he at first hesitates to answer, and in the course of ten minutes will give it. Tongue moist, but more foul than yesterday; bowels not open since yesterday; does not complain of any head-ache. The opium to be discontinued at present.

Two o'clock. Does not appear so sleepy, and is rather more collected; pulse 84; bowels not yet open. Three grains of opium are to be repeated immediately, and in the course of two hours, if the bowels are not open, to have some house medicine.

Four o'clock. He is now in a sound sleep; does not appear so restless, nor has he any tremor; pulse 80.

10. About twelve o'clock last evening it was found necessary to repeat the opium; so also it was the previous night, about the same hour; countenance better, eyes brighter, and not so much suffused; can now hold out his hands without their shaking, but there are now slight twitchings of the face; pulse 100.

11. The medicine has not been repeated since last evening; tongue still very much coated, but not tremulous; hands remain steady. He now complains of slight cough; there is sonorous rattle heard on the right side of the chest; states, now and then he has shooting pains in the head; sleeps

better, still you may observe occasionally the twitches of the face; pulse 100.

12. There has been no necessity for repeating the medicine; all tremor seems to have ceased, also the twitchings of the face. He appears now quite collected, and answers questions without any hesitation; pulse 100; tongue coated with a thick, creamy-looking mucus.

13. Continues better; tremor gone; sleeps pretty well; eyes cleaner; pupils not so contracted; tongue the same as yesterday; pulse 96, full, but soft.

11. Tongue and hands again slightly tremulous; has chattered a good deal in his sleep, and been very restless; pulse 100.

R *Opii*, gr. iij. *hæc nocte*.

15. Tongue better, not so tremulous, but is now covered with some thick, yellow mucus in the centre, and white about its circumference; countenance improved; eyes bright; pulse 96, soft; sleeps badly; bowels regular.

16. Appears a little better this morning; still there is slight tremor of the tongue and arms; pulse 100.

17. Has not required any more of the opium. Continues to improve.

18. Much better; tongue still coated with a thick creamy mucus; pulse 68, soft; slept badly last night.

R *Opii*, gr. iij. *omni nocte*.

20. He takes the opium every night, but it does not appear to affect him till morning, when he generally begins to feel sleepy. Tongue cleaner, but still foul; tremors entirely ceased; answers questions much more readily than when he came in; pulse 72, soft.

21. The opium does not produce any effect for the first twelve hours, consequently he can get no sleep at night, but sleeps all day; therefore, to alter this, Dr. Elliotson ordered the medicine to be taken every morning instead of night.

22. Slept pretty comfortably last night; he took a dose of opium in

the morning; other symptoms much better; pulse 60, soft; bowels regular.

24. Sleeps well; tremor gone; he can now walk about the ward, without any inconvenience; complains of weakness.

28. Continues to improve.

Jan. 1. Every symptom of the disease has left him, but feels very weak.

R *Quinine sulph.* gr. iij. *bis die*.

8. Much stronger; appears pretty well in health.

10. Continues well. This morning Dr. Elliotson discharged him.

#### ULCER OF THE LARYNX.

Henry Roberts, a carman, of dark complexion, admitted, Jan. 11th, into William's Ward, under the care also of Dr. Elliotson; states he has been unwell for six months. Now he complains of pain in the region of the larynx, much increased by the action of deglutition, also by external pressure; voice harsh; frequent cough, which is also hoarse; expectorates a quantity of thick purulent mucus. When he coughs, he finds the pain extend downwards towards the trachea. Upon applying the stethoscope, the mucous rattle was distinctly heard, both in the region of the larynx and the trachea. Respiration heard all over the chest; action of the heart healthy; breathing much affected; occasionally he feels as if nearly suffocated; no appetite; feels thirsty; tongue white, red at tip and edges; bowels regular; pulse 100, very weak; great emaciation.

R *Pilul. hydr.* gr. x. *bis die*.

R *Opii*, gr. j. *omni nocte*.

*Emp. lytta laryngi.* Porter, lb. j. *daily*.

Continued in the state described until twelve o'clock last night, when suddenly he appeared very easy, the nurse went to see if he was asleep, and found him dead.

*Autopsy.*—Upon examining the larynx, an ulcer was found situated between the thyro-arytenoid ligaments, which were entirely destroyed; the

ulcer appears first to have existed in the ventricle of the larynx, on the left side, and gradually to have eaten away the chordæ vocales, as well as the surrounding folds of mucous membrane, so that the rimæ glottidis was partially destroyed. The thoracic viscera were found perfectly healthy, so also were the abdominal viscera. The brain was not examined.

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#### NOTTINGHAM GENERAL HOSPITAL.

ON Saturday, January 12th, Baron Heurteloup gave a practical illustration of the system of breaking stone in the bladder.

The patient, John Hancock, sixty years of age, a frame-work knitter, a native of the town, had been subject to gravel twenty years, frequently passing, per urethram, small stones, which, from the history he gives, have always been formed in the kidneys. About five years ago, a calculus, probably larger than usual, having passed from the right kidney, remained in the bladder, and, after eighteen months' suffering, he entered the hospital, under the care of Mr. Oldknow, who performed the lateral operation; the patient recovered, and left the hospital in a few weeks. He had no return of the symptoms of stone for two years: about eighteen months ago, he began to pass small calculi occasionally, and, six months ago, one which had passed from the left kidney, remained in the bladder, and producing the usual symptoms of stone, induced the poor man again to enter the hospital, desiring rather to be cut a second time, than suffer the continued pain.

His surgeon, Mr. Oldknow, considering this a very fit case for lithotripsy, wrote to Baron Heurteloup, stating the circumstances. The Baron at once, most handsomely offered to come to Nottingham, and perform the operation gratuitously. On Friday he came, and, having sounded the pa-

tient, determined to operate on the following day. The medical gentlemen of this and the neighbouring towns assembled, and were exceedingly gratified with the operation, which the Baron performed with the percursor: he introduced the instrument, seized the stone, and broke it so rapidly, that it excited the admiration of all present, more particularly of the patient himself, who, all the time, had been expecting something serious.

The stone was of small size, and composed of the mixed phosphates. It is probable, that no fragments remain, except such as may pass per urethram; many pieces, about the size of peas, larger or smaller, have come away. The patient is relieved by the operation, and has not in any way suffered from it.

After the operation, the Baron gave a very interesting and satisfactory demonstration of his instruments.

In the evening, a number of those gentlemen, who had witnessed the operation, had the pleasure of again meeting the Baron at a dinner, to which they had invited him.

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#### CASE OF OBSTINATE CONSTIPATION

BY MESSRS. STONE AND CREASY,

*Brasted, Kent.*

GEORGE POCKNELL, aged 45, a husbandry labourer, of temperate habits, bilious temperament, and subject to irregular action of bowels, was attacked with pain in the left hypogastrium, while attending an auction sale on the 24th September, 1832; he then took a glass of spirits, which increased his uneasiness. On his return home, he took two table-spoonfuls of castor oil; finding this did not relieve him, or act on the bowels, he repeated the dose on the morning of the 25th, and, in the course of the day, he also took an ounce of salts without effect.

About eleven o'clock P.M., we received a message, informing us of his state. He was ordered ten grains of

calomel immediately, and a solution of sulphate of magnesia in mint water, to be taken every two hours, with pills of extract of colocynth and calomel.

26. On visiting him this morning, we found the medicine had not operated; he was in pain at intervals, but not greater than he had frequently suffered before, when his bowels were constipated; his pulse was natural; no fever; tongue clean: he had retained all the medicine which he was desired to continue the use of, and we saw him again in the evening. Reid's injecting syringe was used, as the medicine was found not to have operated; a quart of gruel was injected, to which was added two table-spoonsful of salt, as much sugar, and two ounces of lard, and ten drops of croton oil, this brought away a considerable quantity of knotty faecal matter; hoping, from this circumstance, that the continuance of these means would remove the constipation, he was ordered an injection every hour, until the medicine acted; fearing inflammation would supervene, a pint of blood was abstracted from his arm, directed him to be constantly fomented, and to continue his medicine.

Had there been any convenience for a hot-bath, it would have been ordered.

27th. Previous to his being seen this morning, Sir A. Carlisle, who was on a visit in the neighbourhood, saw the patient, and requested to communicate with us on the case; he formed the same opinion, that the case was one of impacted faeces in the colon, and recommended a blister over the abdomen, and a mixture composed of six ounces of infusion of senna, with two ounces of castor oil, two table spoonsful to be taken every two or three hours, as the stomach would bear it, and to inject a solution of soft-soap in any menstruum we might think proper. To the soap was added one ounce of oil of turpentine. He had three of these injections before the evening, which returned without

the desired effect. In the evening they were repeated, and ten drops of croton oil added. He became very sick, and threw off a large hand-basinful of undigested matter from the stomach. From this time scarcely any thing was retained there; still no acceleration of pulse or heat of skin.

28th. To quiet the stomach he now took salines in a state of effervescence, which had the desired effect for about twelve hours, when he again became sick, and complained that the medicine felt cold in the stomach, and increased the pain. Pulse and skin the same: injections of gruel, salt, sugar, and lard, every hour; discontinued the medicine; less sickness through the day; no faeces passed. In the evening he was ordered to take two teaspoonsful of castor oil every two hours through the night, which was retained.

29th. Still no evacuation of faeces. Infused two drachms of tobacco in half a pint of water, and injected it. This he retained about a quarter of an hour, when he became very faint, and brought it away without any faecal matter.

In the evening a hot bath was procured, the water being brought from his employer's house. This gave him but little relief although he continued it, at times, for a week. Every purgative that could be thought of was administered, both by the mouth and injections, without effect. The case would have appeared hopeless had not the pulse remained quiet, with the absence of fever. Distention, by injecting large quantities of salt and water, was had recourse to, and a gallon at a time was injected, hoping that if the mischief arose from impacted faeces in the colon, distention might bring it down; but this, like previous remedies, failed.

30th. Took an ounce of crude quicksilver every two hours, without the desired effect. Six ounces were taken, when he complained of increase of pain from the weight, and discontinued it. This day he vomited



faeces, and continued to do so at times daily. We now began to fear, from the obstinacy of the case, that there was intraseption of the bowel, and feared the case would terminate fatally.

Becoming weak, he was now ordered injections of mutton broth frequently, which he retained, and took the same by the mouth, with the addition of a little wine; he also took a mixture composed of castor oil an ounce, potash two scruples, tincture of henbane three drachms, in mint water, a table spoonful or two to be taken every three hours. This mixture was given him with a view of its mitigating pain and acting as a solvent, should impacted faeces prove to be the cause of his illness, of which idea we could not divest our mind, from his previous constipated habit of body. This he continued, with such variations as suggested themselves, until the 20th October, with copious injections once or twice a day.

21st October, he began to take pills, composed of fetida, with extract of colocynth, every four hours, with a mixture of nitrous æther in camphor water, with a view of relieving flatulency. This mixture he continued until the 25th.

Being in great pain this morning, the injection of salt and water was repeated, which he retained about half an hour. On getting out to the night chair, he voided, at three times, two and a half large chamber utensils full of faecal matter, much of which was in small hard pieces; the quicksilver passed at the same time, and the evacuations smelt strong of the fetida. From this moment he became easy, and continued so at three o'clock in the afternoon, at which time his abdomen was soft and natural, his countenance animated, and he expressed great confidence that he should soon be about again. He was not in the least faint from the evacuation, but expressed a great desire for food. From this period he rapidly recovered.

## BOOK.

A Theoretical and Practical Treatise upon the Ligation of Arteries. Translated from the French of P. J. MANEC, M.D., Professor of Anatomy, &c. By J. W. GARLICK, M.R.C.S., and W. C. COPPERTHWAITTE, M.R.C.S., with Notes and Appendices, selected from the writings of many celebrated surgeons. 4to. pp. 227. Fifteen Plates, beautifully executed. Halifax, Whitby and Booth; London, Highley.

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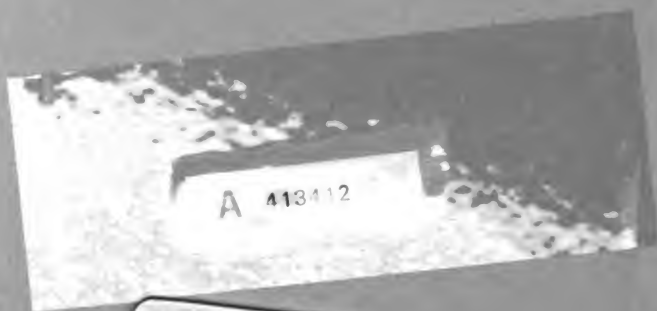


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