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CANADA

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MEDICAL AND SURGICAL SCIENCE.

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ORIGINAL COMMUNICATIONS.

ART. VI.—*Cases of Hernia, with observations on wounds of the Intestines.* By WOLFRED NELSON, M. D., &c., Provincial Inspector of Prisons, &c., &c.

SHOULD the following narrative of a case of Hernia be deemed worthy of record in your Journal, it is quite at your service. It appears to me to possess some interesting features, and may not be entirely unworthy of the notice of your readers. It has made an indelible impression on my mind, and has led me to pay more attention to this part of surgery than any ordinary case of strangulated bowel would have done.

In the month of March, 1811, I was requested to see a man 60 years of age, who was reported to be at the point of death. "He was "just brought in from the sugar bush, where, for the last two days, he "had suffered violent pains in the belly; could not go to stool, and was "incessantly vomiting, and withal, had a large swelling at the bottom of the body." From this brief detail, I at once inferred the existence of strangulated scrotal hernia. I found the man cold, bathed in a profuse clammy perspiration, with constant hiccup, very weak, and almost pulseless. He had for many years been affected with a scrotal hernia, and now it was the size of a quart decanter. After administering a large dose of laudanum and ammonia, and waiting some time for its anodyne effect, I proceeded with the utmost caution to reduce it by the taxis; but my efforts, though at first gentle, then, more forcible and persevering, proved ineffectual. He was then told, that the only chance for his life was through the means of an operation. This was at once submitted to. An incision was made a short distance from above the protrusion, and carried down to near the bottom of the scrotum, at least seven inches long; after a little careful dissection, the sac was punctured,

and about an ounce of dark colored serum spirted out; it was then opened from end to end, and immediately the bowel bulged out; it was of a deep chocolate hue, indeed it was so dark and livid, that I should almost have taken it to be mortified, if Traver's work on "Injuries of the Intestines" had not been present to my mind. It was with the utmost difficulty I could insinuate the tip of my finger under the tight, hard edge, of the ring; a slight touch with the bistoury caused the tense tendon to expand considerably, quite sufficient for any common case of rupture; it was dilated again and again, but the bowel would not recede, nothwithstanding that I urged it forward with my expanded hands, gently, but persistantly; it being so extremely tender and distended, that further effort, I apprehended, would cause it to burst, and thus make matters worse. Under this emergency, I at once plunged my lancet, transversely, in the bowel, when out gushed at least a pint of liquid fæces and serum, and a good portion of gas; the bowel, perforated as it was, was returned into the abdomen; the wound closed, and a large soft compress was put over the inguinal region, and confined there by means of a broad flannel band, with which the abdomen was swathed. The utmost quietude was enjoined; nothing but a spoonful of tea or weak broth, at distant intervals, was allowed. In the evening, an enema was administered, which brought away some fæcal matter and wind. Not a single unfavorable symptom occurred, and in a few weeks, he was quite well, and lived to the good old patriarchal age of four-score years.

Since that time I have punctured the intestine on a few occasions, and I must be candid enough to admit, on a couple of them, without absolute necessity, yet did not the smallest appreciable injury arise from the procedure.

Perhaps a few remarks on the above case may not appear irrelevant or inopportune; and may, perhaps, have the effect of drawing the attention of other operators to a line of conduct, new to them, perhaps, but which, under similar contingencies, they may be disposed to follow, and I trust, with equal success.

When I performed the above operation, I had not seen John Bell's matchless work on wounds, a work, which it is quite safe to predict, will ever be looked upon as a standard and correct authority on the nature and cure of wounds, else it might be suspected that I had, in a great measure, been guided by his remarks on wounds of the intestines. I was, however, influenced by the very same reasoning that induced him to come to the conclusion that injuries of the bowels were not so dangerous or necessarily fatal, as it was thought they were, in his day, and as they are deemed to be, at this very period. This is the logic I used on the occasion. If wounds of the abdomen were so fatal, how comes it,

that a bullet has passed through and through the body without causing death; and the bayonet has a thousand times been pushed through the belly and made its appearance opposite, and still the soldier lived; the sword of the duellist, in innumerable instances, has pierced the antagonist and pinned him to the ground, and still he got well; and I have witnessed a few cases, where pitchforks have entered the whole length of the prongs, yet death did not ensue, and such events have been so frequent that they cannot be called exceptional cases. Seeing, I thought, it was impossible that in all such occasions, the intestines and other viscera could escape injury, how was it, that their contents did not flow out into the abdominal cavity? Because, I replied in my soliloquy, for I had no one to consult with, there is in reality no cavity or empty space there; all is filled up and kept in juxta-position by the abdominal muscles and atmospheric pressure, to overcome which it would require considerable distention in the bowels, or an increased or inordinate activity of the peristaltic motion. In this case, both stomach and bowels had been pretty freely emptied by vomiting of stercoraceous matter; and the collapse that would naturally ensue, and indeed existed, would for a time at least keep all in a state of quiescence, than which, no event could be better adapted to prevent excitement and inflammation. On these principles it was, I felt pretty sure, that there could be no effusion into the peritoneum, nor much inflammation to be apprehended. The result fully justified my expectations, if it did not completely confirm my reasoning on the subject.

Not long after the above occasion, I obtained "John Bell on Wounds," and was highly gratified to find that he corroborated the views I entertained with regard to wounds of the abdomen. At page 324, 3rd Ed., we find the following graphic remarks: "The whole mass of the bowels is alternately pressed, to use a coarse illustration, as if betwixt two broad hands, which keep each turn of the intestine in its right place while the whole mass is regularly moved," and goes on to say, "we find a person, after a wound of the intestine, having free stools for many days; and what is it that prevents the fœces from escaping, but the regular and universal pressure?" On this, as on most other subjects, this eminent surgeon expresses his sentiments with peculiar clearness, a good sense that is at once convincing, and in a style that leaves a lasting impression. He thus explains the cause of the prompt healing of certain injuries of the bowels: "The tendency of the peritoneum to inflame is the chief cause of danger, as *also of the only means of safety.*" "It is thus that in a few hours the adhesion is begun that is to save the patient's life."

On entering upon my career, Pott was the great authority of the day on surgical matters; one which on most important points in surgery is referred to, or cited at the very time as a sure and safe guide, and one

that is not cast into the shade, even by the great names of Astley Cooper, Scarpa, or Lawrence; but still, it appears to me, that his ideas with regard to injuries of the intestines, are not characterized by his usual good sense, judgment, sound views, and discernment, and evinces pusillanimity, little in harmony with his usual decision and boldness. Such was the dread he entertained of the smallest injury to the bowel, that a mere scratch would almost induce him to pinch the part up, and stitch it with a waxed ligature, lest, through the merest possibility, a single drop of intestinal fluid should escape. This sentiment led him to deprecate in the strongest terms any operation on the part. In Earle's edition of his celebrated works, vol. 2, p. 62, he alludes to puncturing the bowels in this wise: "There is another method of endeavouring to obtain relief in this case, which has been proposed by few, and I hope practiced by, fewer (though I have seen two patients upon whom it has been tried and were both destroyed by it); it is the making of several punctures with a round needle through the hernial tumor into the gut, in order, it is said, to let out the air which is *supposed* to distend the latter, and prevent its return;" and goes on saying, "it is really too absurd to waste either my own or the reader's time about it." Now, the causes of death in these two patients originated from the non-performance of the usual operation, far more probably, than from the puncture by the round needles.

I freely acknowledge, that I should not hesitate to puncture the hernial tumor with an exploring needle or trocar, if I was satisfied that the swelling was mainly caused by gas, whether originating in the intestine itself, or coming from above the stricture, of which event, I could readily conceive; and I have in many instances, while practising in the country, seen the scrotum immensely distended in this manner, and have heard a regular roar of wind pass up, followed immediately by the return of the bowels.

Although it may militate against the position I am disposed to assume, I fear not to cite the great authority of the learned William Lawrence, than whom, no country has ever produced a more zealous and scientific surgeon, and he is quite as dogmatic on this subject as the illustrious Pott himself. He lays down this rule: "When a small opening is found in the intestine, we should pinch up the aperture, tie it tightly, cut off the ends close to the knot, and then return the bowel." A little further on he says: "Should the intestine receive a large wound, it might be necessary to employ ten or more points of suture, or to unite the parts by the uninterrupted suture."!!!

But if I have such high authority against me, I have, on the other hand, several great names to sustain the position I have assumed, besides a vast amount of experience that might be adduced. The distinguished

German surgeon, Richter, says: "I have sometimes seen that such small wounds of the intestines in operation for hernia were little thought of, and were unattended with danger. The equally able Jobert asserts, "the intestine may be returned without suture, if the wound does not exceed three lines."

In Bœrhaave's Aphorisms, (314), we are told: "If the intestines are injured with small wounds, they may be left to themselves;" a practice, in my very humble opinion, far preferable to "wrinkling them up," as Bœrhaave remarks, by ligatures; and his commentator, Van Swieten, states, "that even pretty large wounds of the intestines have been cured spontaneously, though they were sufficient to let out the contents. In another place, this indefatigable writer makes the following statement, one which is in direct opposition to the *dictum* of Lawrence: "If the bowel should continue distended with flatus, the distended part may be punctured with a needle in several places to discharge the flatus."

As a pendant to the above most respectable authority, and in support of the position I have dared to take, I shall transcribe from John Bell the following interesting case, to which Van Swieten refers also, that "delivered by Mr. Lithe, in 1705. It is the case of a madman who stabbed himself with eighteen wounds in the belly, and of these eighteen wounds made with a long and sharp pointed knife, eight penetrated into the cavity of the abdomen. Under the judicious treatment adopted, he recovered. But here lies the important point: eighteen months after, he threw himself from a high window, and died upon the spot. Upon opening the body, it was found, *first*, that the liver had been wounded, and had adhered in its middle lobe to the inner surface of the peritoneum; *secondly*, the jejunum had been wounded just below the stomach, with a cut *half an inch* in length, across the gut, and this intestine, lying deep, was not pressed against the internal surface of the belly, but was kept in close contact with a contiguous turn of the same gut. The two turns of the intestine adhered to each other; on the one intestine was the scar of the wound, while the other turn of intestine, to which it adhered was sound; *thirdly*, the right side of the colon had been wounded with a cut of *an inch in length;* the adhesion here was to the inner surface of the peritoneum by eighteen or twenty long thread-like tags of cellular membrane, arising from one of the greatest scars in the belly." John Bell's remarks on the old method of stitching up a wounded gut are full of sound sense and good instruction, and quite interesting, from his peculiar way of censuring what he deems gross and absurd errors; to neighbour and kinsman he is equally unsparing of his lash, when he believes it to be well merited!

The object I have in view in publishing my first operation for stran-

gulated hernia, is not to boast of its success, nor yet to recommend the practice on all occasions, but merely to prove that wounds of the intestines are not so fatal as they are generally said to be, and that a surgeon should never be devoid of resources, nor hand over to certain death, cases, that might be saved by a bold but judicious departure from general rules. It seemed to me, that I was placed on the horns of a dilemma. To have dilated the ring, I would almost say the abdominal parietes, sufficiently for admitting of the easy return of the bowel, enormously distended as it was, would have exposed the epigastric artery to injury, and might have induced peritoneal inflammation; and, on the other hand, to have used as much force as required to return the bowel, would have certainly exposed it to tear or burst, being very tender, and almost black, and, therefore, I had no other resource but emptying the bowel.

On some future occasion I may communicate the particulars of a recent and fatal case of Inguinal Hernia, that had been repeatedly strangulated, but when returned, there remained a fullness in the canal that denoted the pressure of something unusual, most probably of the sac, much thickened and firmly attached to the part. Upon operating, this proved to be the case. On the fourth day the operation was reluctantly submitted to, and as reluctantly performed, and that as a "forlorn hope," seeing there were great pain, tenderness and tension of the abdomen, attended with vomiting and hiccup, and other marks of approaching, if not of actual, gangrene; the superincumbent parts adhered firmly to the sac, and this to the intestine, the whole forming, as it were, one homogenous mass. On attempting, with the utmost caution, to separate the parts, the bowel was slightly punctured, on which a little gas escaped. The bowel was quite black and of a *dull* hue. Notwithstanding every effort it was advisable to make, complete reduction could not be obtained, in consequence of the adhesions. The patient, however, felt easier for a short time; but the hiccup continued, and all the symptoms denoted mortification, and, forty hours after the operation, he died. No persuasion could induce the friends to permit a *post mortem* examination.

ART. VII.—*Cas de Fracture comminutive de l'Astragale, avec observations*, par HECTOR PELTIER, M.D., Edimbourg, Professeur d'Instutes de Médecine de l'Ecole de Médecine de Montréal, un des Médecins de l'Hôtel-Dieu, Médecin de la Maison St. Joseph, du Dispensaire de Montréal, un des Médecins de l'Assurance "National Loan fund" sur la Vie, et membre de plusieurs sociétés Médicales, etc etc.

Je profite de l'occasion favorable offerte par les Editeurs du présent Journal de Médecine pour donner publicité au cas suivant dans ma langue maternelle, et je les prie de recevoir d'avance mes bien sincères remercîments.

Le cas dont je veux entretenir les lecteurs du Journal, est un des plus intéressants que j'aie rencontré et qui fait honneur à la chirurgie moderne et le seul que je connaisse de son espèce. Un nommé Poirier, maçon, âgé de 40 ans et résidant dans Montréal, tomba du deuxième étage d'une maison rue St. Paul, appartenant à M. Benoit, le 9 Juillet 1850, à 7h. du matin. Il tomba sur les pieds, le pied droit glissant sur la chaine du pavé. Il fut transporté de suite à l'Hôtel-Dieu. Le Dr. Munro, le Médecin en chef du dit Hôpital, fut aussitôt appelé et comme on l'avait prévenu que c'était un cas qui selon toute apparence réclamait une amputation immédiate il m'amena avec lui en consultation.

Le malade fut interrogé minutieusement et la plaie examinée attentivement, nous trouvâmes une fracture comminutive de l'astragale avec déchirure des parties molles et perte de sang assez considérable. La malléole externe sortait en dehors de la plaie de manière à faire presque croire par les mouvements qu'on y faisait qu'il y avait également fracture du Péroné. L'astragale, par sa fracture complète s'était retournée sur son axe, de manière que sa portion articulaire tibienne se présentait à travers les parties molles à la partie externe du pied et non pas en avant. Le ligament externe était complètement déchiré.

Une plaie semblable avec fracture et cela dans une articulation nous fit hésiter un moment sur ce que nous devions faire! Pendant que notre esprit était ainsi en oscillation (moment terrible et que le vrai chirurgien seul sait apprécier), le Dr. Munro avait la main dans la plaie et remuait la partie fracturée de l'astragale, lorsque, à notre grande surprise, toute la portion articulaire tibienne fut enlevée avec la main. Le Dr. Bibaud, que l'on avait fait appeler, arriva au même instant. Nous décidâmes alors tous trois de laisser la nature opérer la guérison, sachant bien que si les choses n'allaient pas, nous pourrions encore avoir recours à l'amputation de la jambe. Heureusement que la nature, toujours si sage et qui se joue quelque fois du médecin, guérit notre homme. Il pût quitter l'hôpital le 26 Août 1850, c'est à dire, 48 jours après

l'accident. Il a marché, à l'aide d'une canne, en boitant pendant plusieurs mois. Je l'ai vu fréquemment depuis plus d'un an et il marche bien facilement, ne se sert plus de canne, et boite très-peu.

Je dois ajouter qu'il n'y a pas d'ankylose complète, puisque le pied a conservé des mouvements faciles et que le raccourcissement est peu considérable.

Il s'est donc formé là une autre surface de glissement pas aussi entière que la véritable.

La portion d'os enlevée est en la possession du Dr. Munro.

Ce cas est comme l'on voit un des plus beaux résultats de la chirurgie moderne. Personne n'ignore que depuis plusieurs années la chirurgie à changé de face ; autrefois quand on prononçait le mot chirurgien, il nous semblait voir l'homme de l'art avec tous ses instruments, prêt à ne reculer devant aucune opération. Il y en a encore beaucoup aujourd'hui de ces hommes, haut placés, tant en Amérique qu'en Europe, dans leur profession, qui ne se font aucun scrupule, dans l'espoir d'obtenir quelque réputation, de faire une opération quelconque sans s'occuper des résultats même de l'opération. Si encore les pauvres malheureux ainsi mutilés avaient toujours la chance de tomber entre des mains habiles, les résultats seraient moins à craindre.

Aujourd'hui le vrai chirurgien est en outre médecin, de sorte qu'il peut ainsi éviter une opération inutile.

De plus le vrai chirurgien avec les connaissances actuelles sait qu'il peut, par des moyens nouveaux, soit administrés à l'intérieur comme remèdes ou à l'aide d'appareils employés à l'extérieur, sauver une foule de malades de la mort en leur évitant toutes les angoisses physiques et morales d'une opération soit avant, pendant, ou après.

Le désir d'opérer est un écueil dans lequel sont tombés de grands chirurgiens. Je citerai, entre autres, Dupuytren qui pour satisfaire aux caprices d'une dame de haut parage, lui enleva une petite tumeur du sein droit. Cette dame mourut quelques jours après des suites de l'opération simplement pour avoir voulu qu'on remédiât à quelque chose qui, quand elle se décolletait, choquait, croyait-elle, la vue des indiscrets. une dame anglaise consulta un jour un grand chirurgien de Paris pour une petite tumeur, très-insignifiante de sa nature, qu'elle portait sur une des joues. Le chirurgien la lui enleva et la malade mourut peu de jours après. Je voulais rapporter ces deux cas dont les opérateurs sont bien connus de la profession, car tous mes confrères le savent aussi bien que moi, combien y en a-t-il, en Canada comme ailleurs, qui, pour gain et pour réputation, ont fait des opérations inutiles, dangereuses et mortelles, et qui surtout n'avaient nullement les qualifications requises du chirurgien.

Le premier cas de triomphe de la chirurgie moderne dont je fus témoin fut celui d'une nécrose syphilitique, occupant l'articulation tibio-tarsienne d'un jeune homme, dans une des salles de l'hôpital de la Pitié, à Paris, sous les soins de M. Bérard, dont j'étais alors un des élèves-externes. M. Bérard, après l'avoir gardé dans ses salles pendant quelques jours, lui proposa l'amputation de la jambe. Un jeune étudiant qui avait vu le cas, en parla aussitôt à M. Lisfranc qui fesait un autre service de chirurgie dans le même hôpital. M. Lisfranc fut satisfait de l'occasion qui s'offrait de pouvoir blesser un professeur de la faculté. Le malade quitta le service de M. Bérard pour celui de M. Lisfranc qui assurait de pouvoir le guérir sans en venir à l'amputation. En effet un traitement anti-syphilitique approprié conserva la jambe du malade et le guérit de sa nécrose.

Je me plais du reste à dire que c'est le seul cas que je puisse attribuer à M. Bérard, pendant près de deux ans que je fus dans son service. Car à sa louange il n'avait point la manie opératoire d'un grand nombre d'autres chirurgiens et s'était acquis une grande réputation comme chirurgien distingué, non pas tant pour les opérations qu'il faisait que pour les opérations qu'il évitait.

Ce cas, je le repète, je l'ai cité parce qu'il m'avait frappé.

Une semblable maladie chez une jeune Irlandaise fut soumise à mes soins. Je lui fis suivre un traitement anti-syphilitique et elle fut radicalement guérie après une année de traitement. Cette jeune fille avait été pendant six mois dans l'Hôpital Général de cette ville où on lui avait proposé l'amputation. Quelques personnes bienveillantes la firent entrer dans une maison de charité et c'est là que je la traitai. Je fis voir le cas à plusieurs de mes confrères, en ville, dont quelques-uns mêmes l'avaient vu à l'Hôpital et avaient été témoins de la proposition. Je veux, en terminant, vous citer la nouvelle opération proposée par M. Wakely, de Londres, et qui consiste, dans les cas de nécrose ou de carie de l'extrémité articulaire du tibia, à enlever la partie nécrosée du tibia et une portion de l'astragale qui lui servait de coussin et à former ainsi une nouvelle surface articulaire, mais ankylosée.

Je ne puis me permettre de juger cette nouvelle opération, ne l'ayant pas vu faire mais elle me semble très-juste et est encore une preuve du triomphe de la chirurgie moderne qui est de conserver le plus possible, car au lieu d'amputer la jambe comme autrefois, ou bien d'enlever le pied par les procédés de M. Baudens, chirurgien en chef de l'Hôpital militaire du Gros Caillou, à Paris, ou bien d'enlever également le pied par le procédé de M. Syme, l'habile chirurgien d'Edimbourg, lui Mr. Wakely conserve au moins le pied, c'est-à-dire la bâse de sustentation de toute la partie correspondante du corps.

En voilà assez, je crois, pour démontrer qu'une opération étant donnée, il ne suffit pas avec Boyer de s'occuper seulement de ces trois mots "*tutò, citò, jucundè*," mais encore il faut que le chirurgien soit *constitutionnellement conservateur*.

J'aurais pu multiplier les exemples des conquêtes de la chirurgie moderne, mais mon but était seulement d'ajouter le cas, qui fait le sujet de cet article aux autres déjà si nombreux. En prenant congé pour aujourd'hui des lecteurs du journal, je leur dirai que je me propose, de temps à autres, de donner quelque article qui touche plus particulièrement à la pratique en les accompagnant d'observations.

ART. VIII.—*Observations upon the Inutility of the Abdominal Bandage after Parturition, being part of a lecture delivered this session.* By F. C. T. ARNOLDI, M. D., Lecturer upon Midwifery, St. Lawrence School of Medicine, Montreal, &c., &c.

HAVING now told you all the essential points to be rigidly attended to during the process of labour, you must be made as familiarly acquainted with the nursing part of the puerperal state. The child having been disconnected from the mother and the placenta withdrawn, your next care should be, that the uterus has assumed a state of permanent contraction, and for this purpose, you should diligently watch, for at least, half an hour, because, very alarming symptoms may supervene, such as uterine hœmorrhage, syncope, or convulsions. The most common is uterine hœmorrhage. This may take place under various circumstances, but the most ordinary, is an atonic state of the uterus, the cause of this condition may either be immediate or remote, that is to say, immediately after delivery, the uterus may cease to contract, or having, to all appearances, permanently contracted, it may relax, get into the atonic condition, and so give rise to profuse hœmorrhagic discharge. Now this discharge, in both instances, is owing to the *baillant* condition of the uterine venous sinuses; fortunately, however, this is not an every day occurrence, yet apparently, with a view of anticipating such a serious misfortune, our ancestors and modern authors lay down strict injunctions for the application of an abdominal roller or bandage. There was a time, when I would have thought it almost sacrilegeous to have acted in contravention to this precept—but a case happened to come under my charge, in which I was very much interested, and which gave rise to close anatomical investigation on my part. I shall narrate it to you in a familiar manner, and show you the conclusions I came to:

Mrs. A. was confined on the 14th August, 1830. Being a prima

para, it was, as usual, a painful and somewhat tedious case, but on the whole nothing uncommon, the secretion of milk set in within fifty-four hours, and nothing appeared to indicate the prohibition to her sitting up in an arm chair on the fourth day, for the purpose of having her bed made; the bandage had been applied round the abdomen according to orthodox rules. On the evening of the fourth day, she complained bitterly of pains in her loins, and continual bearing down pains—supposing that the bandage had not been applied sufficiently tight, it was drawn a little tighter, but instead of affording any relief, the pains were increased. It then struck me, that as the bowels were in good order, the bandage was the whole and sole cause of the evil, and, to satisfy myself, I examined a skeleton very attentively, and I came to the conclusion that my notion was correct; in proof, gentlemen, only look at this skeleton, and observe (that which I was so careful to impress on your minds in the former part of my course) the very obtuse angle, the brim of the pelvis bears to the axis of the spinal column. You see, that the promontory of the sacrum is several inches above the horizontal line of the pubis—that the promontory projects forwards—the sacrum recedes, and thereby forms a recipient cavity. Again, gentlemen, remark the lateral configuration of the skeleton, and you perceive that the great projecting alæ ilii, the crests of which are on a line almost parallel with the promontory of the sacrum, form the point from which the tapering figure starts upwards towards what is called the waist; this you see is perfectly demonstrable even on the skeleton, how much more so is it as you must have observed, on the soft subject? Well, having satisfied myself on these two points, I first of all came to the conclusion that no well-formed woman could keep an abdominal bandage in its proper place, unless, indeed, it were very tightly put on, and then I inferred that if very tightly put on, it must act very detrimentally on the yet heavy uterus. The bandage you see, to keep its place, so as to act upon the uterus, must be applied over the hip, otherwise, it must act upon the abdominal viscera, and make them press down upon the uterus, in which case, the bandage necessarily slips up to the small diameter of the waist, and can no longer carry out the original object intended, and proves a sore annoyance to your patient, who, believing there is some charm in it, keeps herself in a constant fidget by pulling it down, and pulling it, as she believes, into the right place; now, this of itself, gives rise to much unnecessary muscular exertion. If the bandage be kept tight over the hips, it must necessarily act upon the uterus, and that, in two ways, presuming it in the first place to be necessary, it must be for the purpose of exciting the uterus to contraction, or it must be for the purpose of arresting uterine hemorrhage, but I maintain, that it can produce neither

the one nor the other effect; in the first place: it mechanically presses the yet heavy uterus into the bottom of the sacrum (which affords it every facility to descend) and thereby, lays the first seeds for prolapsus uteri, and in the second place, if uterine hemorrhage do supervene, it is one of the most fallacious resorts you can trust to; but further, I will tell you when I come upon that subject. To come back to my case, Mrs. A., as I told you before, suffered much from bearing down pains on the fourth day, and I may now add, she continued to do so for many months after; time rolled on and still the pains continued, until fortunately she again got in the family way, but even then, and for the four first months, she was constantly threatened with a miscarriage. She, however, had the good luck to go on to her full time. I delivered her the second time, and determined not to use the bandage again, in lieu of which, as a matter of precaution, I exacted a little more bed rest. My orders were strictly attended to, and her recovery was all that could be wished for. From that day to this, she has had no recurrence of bearing down pains after her confinements, though similarly treated, notwithstanding her having had ten more children, making twelve in all. Since my experience in this case, which was in 1832, (her second confinement) I have never applied the abdominal bandage in my private or hospital practice, I have never met with any sinister results from its omission, and I know of other medical men who have often followed my example equally satisfactorily. Uterine hemorrhage is the great bugbear, and certainly it is a most serious concomitant, but when it does take place, I can assure you, gentlemen, your patient would be badly off, if you had nothing else to trust to, but the abdominal bandage. Obesity, or the becoming (to use vulgar parlance) "pot-bellied," is the next argument against the omission of the bandage, but I can assure you, that in the whole of my practice, I cannot trace one single instance to such a cause. Hear what a lady writes to me from Quebec, "Dear Doctor I was confined on————, and I determined on following your instructions to the letter. My physician and nurse thought I was mad, nevertheless, I maintained my point, and certainly, I have every reason to be grateful to you, for besides having made a much more favorable recovery than usual, I have been relieved of that horrible annoyance,—*the belly band; and the bearing down pains have not returned.*"

Again, gentlemen, let us look at the puerperal state in a strictly pathological and physiological point of view. Is not parturition strictly and simply a natural and healthy process? Certainly it is, except under casual circumstances. Can the distension of the abdomen from uterogestation be compared with the abdominal distension from ascites? No! In the one instance, you have a healthy tonic, in the other, you have

one of the worst forms of unhealthy atonic action ; in the one, you have a fixed duration, at the end of which tonic muscular contraction sets in, and the abdominal parietes resume their normal condition ; in the other, the letting out of the fluid by the trocar is followed by a mere collapse of the abdominal parietes, so that the capacity of the abdomen would still remain the same, unless a roller bandage were applied. Were I now speaking of uterine hemorrhage, I would point out to you, how thoroughly insufficient the abdominal bandage alone would be ; at any rate, I would show you how much you would be mistaken, if, under such circumstances, you trusted to it, as your main stay. Talking of uterine hemorrhage, it is a very singular fact, that during a practice of 25 years, I have never met with more than one case, except such as I have seen in consultation, and of that case I was forewarned, as my patient had suffered from it on three former occasions. Notwithstanding, gentlemen, what I have told you as the result of my own practice, I must warn you against being too dogmatic in the course of yours. Old women must have their way, and their ways are almost always based upon prejudice, you, therefore, should be prepared and willing to consent to their notions. If, you perceive a very especial desire for the application of the abdominal bandage, my advice to you is, by all means, to consent to it ; it is only necessary for you to see that it is not put on so tight as to endanger your patient to future uterine inconveniency.

Observations sur le Plessimêtre et la Percussion, par le Dr. TAVERNIER.

MM. LES EDITEURS.—Dans votre revue critique de l'œuvre du Dr. Walshe, *sur les affections du poumon et du cœur*, traitant de la percussion et des mérites relatifs des différens moyens de percuter, vous semblez approuver sa manière de voir, et traiter bien légèrement l'utilité du plessimêtre et du stéthoscope. Comme dans le chapitre précédent vous avez vous-même prouvé que le savant Professeur n'est pas toujours infaillible, qu'il a pu, une fois du moins, se méprendre, il se peut qu'on puisse différer d'opinion avec lui sur d'autres points encore et se croire dans le vrai.

Le Dr. dit " Notwithstanding that some modern clinical teachers applaud their *hammers* and other instruments, we have ever inculcated upon students the necessity of using their fingers for this purpose. In practice we must go about without our hammers, lung stethoscopes, &c."

Pour être de cet avis il faudrait donc ne plus se servir d'instruments tels que les différens spéculum, les sondes, etc., qu'il doit pourtant substituer aux doigts, lorsqu'il s'agit, par exemple, de découvrir l'exis-

tence d'une pierre dans la vessie, la sonde est cependant autrement embarrassante qu'un plessimêtre, et c'est pourtant encore un des *hammers* qu'il nous faut de toute nécessité transporter partout avec nous dans la pratique. Cette objection me paraît bien futile.

Ayant suivi pendant quelques mois la clinique de Mr. Piorry, à l'Hôpital de la Pitié, et ayant pu, en conséquence, apprécier les avantages aujoud'hui incontestés, à Paris, par le plus grand nombre, par ceux qui d'abord paraissaient les plus incrédules, je crois utile de réclamer dans l'intérêt de la science, contre l'opinion qui semble vouloir établir en axiôme, " qu'en médecine les organes naturels doivent toujours de préférence remplacer l'usage des instruments," ce qui n'est pas plus fondé quand il s'agit de science médicale, que lorsqu'il s'agit de toute autre science.—Aurions nous, sans le microscope aussi bien que le télescope, et avec les yeux seuls, pu découvrir ces myriades d'êtres vivants dans une goutte de rosée, et apercevoir dans l'immensité de l'espace ces mondes au-delà desquels se meuvent d'autres mondes? De même que la vue ne peut pénétrer aussi loin sans leur secours, de même les doigts ne sauraient suffire pour arriver à autant de précision dans l'appréciation du volume d'un organe ou l'atteindre à une aussi grande profondeur et y découvrir des mondes de faits qui devront refléter, sur le diagnostic et le traitement à suivre, des flots de lumière.

La rate mesure de 7 à 8 centimètres verticalement, j'aimerais à voir le plus habile percuteur reconnaître une augmentation de volume de cet organe de quelques lignes seulement en ne se servant que du doigt, c'est plus que ne pourrait faire Mr. Piorry qui s'occupe de percussion depuis près de 25 ans, et qui, lui aussi, sait se servir du doigt quand besoin est; quand il faut, par exemple, percuter la poitrine chez un sujet amaigri, dont les côtes font fortes saillies, et où il serait difficile d'appliquer aplomb les autres percuteurs; là, je l'ai vu en faire usage, et je suis fort tenté de le croire, avec au moins autant d'habileté que qui que ce soit, ce qui ne l'empêche pas cependant de croire qu'avec le plessimêtre l'on obtiennent des sons plus tranchés, plus distincts. Du côté droit déterminez donc, si vous le pouvez, l'exacte limite qu'atteint le bord supérieur du foie, là où une lame du poumon le recouvre; vous aurez du son pulmonal. Percutez les reins avec le doigt, si vous le pouvez encore, et donnez m'en les dimensions, ou bien circonscrivez la vésicule biliaire engorgée; c'est pourtant ce que j'ai vu faire avec le plessimêtre.

L'on accusait la rate d'être l'organe affecté dans les fièvres miasmatiques, en effet, on la rencontrait engorgée et d'un volume énorme chez la plupart de ceux qui y succombaient; on avait donc raison de l'accuser du trouble qui se manifeste dans toute l'économie. L'on savait aussi que la quinine agissait presque comme spécifique dans ces maladies, quand

son action trop longtemps prolongée ou son administration subite à trop hautes doses, ne produisaient pas une série de nouveaux désordres, tel que des vertiges, des bourdonnements d'oreilles, la surdité, des hémorrhagies et quelquefois même la mort. Eh bien! le plessimêtre qu'on semble tant dédaigner est venu nous éclairer sur ce sujet, comme sur beaucoup d'autres, et rendre raison de ce qui vous paraissait inexplicable. J'ai vu mesurer des rates qui n'avaient pas moins de quinze centimêtres de hauteur, en démarquer les limites, empêcher ensuite le moindre mouvement de la part du malade, administrer 12 à 20 grains de quinine dissoute dans l'alcool ou l'acide sulfurique étendue d'eau, puis après un laps de vingt secondes seulement, mesurer de nouveau et s'assurer que l'organe avait subi une contraction de 2 et même de 3 centimètres dans toute sa circonférence. L'action de la quinine sur la rate a donc pu être constatée au moyen du plessimêtre, on a donc pu, à son aide, se convaincre que son action sur cet organe, est analogue à celle du seigle ergoté sur la matrice ; l'on a pu par là aussi s'expliquer les accidents qui suivent quelquefois son emploi, et s'éclairer dans la marche à suivre pour les éviter. Supposez un cas où la rate est très volumineuse et engorgée, sous l'influence d'une forte dose du remède, ses vaisseaux sont fortement contractés, et peuvent dégorger subitement dans le torrent de la circulation, une assez grande quantité de sang vicié pour en altérer la masse, et par l'expansion soudaine des vaisseaux, produire tous les désordes ci-dessus—vertiges, hémorrhagies, etc., etc.

Messieurs Barth et Rogers, disent, dans leur *Traité pratique d'Auscultation et de Percussion*, que les données fournies par le plessimêtre permettent de pousser encore plus loin le diagnostic, de distinguer la dilatation avec amincissement de la dilatation avec hypertrophie des parois, comme de reconnaître les altérations isolées de telle ou telle cavité, etc.

Ceci devrait suffire pour ne pas rejetter inconsidérément un instrument au moyen duquel on peut, dans nombre de circonstances, suivre, pour ainsi dire, pas à pas la maladie, et, par le plus ou moins d'effet sur l'organe malade, régler le traitement, déterminer la durée et en pronostiquer avec une presqu'entière certitude, l'issue heureuse ou funeste.

Il est dit dans le *Dictionnaire des Dictionnaires, de Fabre*—" Mr. Piorry, guidé par la propriété qu'ont certains solides mis en vibration de propager ces vibrations aux corps avec lesquels ils sont en rapport, imagina de percuter à l'aide d'une plaque d'ivoire. Le caoutchouc par lequel Mr. Louis voulut la remplacer, n'a été adoptée que par peu de praticiens."

Quand au *long stéthoscope* dont il est aussi question, quoique j'admette que dans la plupart des cas l'on puisse s'en dispenser, pourrait-on

le faire convenablement, lorqu'il s'agit d'examiner la poitrine chez une jeune personne du sexe, ou lorsqu'il est nécessaire de faire l'exploration, la peau étant couverte de lèpre ou d'autres maladies; ce serait fort plaisant d'avoir alors recours à l'auscultation immédiate.

Je conclus donc que, dans ce cas encore, le Dr. Walshe est trop exclusif; et que, quant à ce qui regarde le plessimètre, on ne saurait avec les doigts les plus exercés arriver au même degré de précision dans l'évaluation des dimensions d'un organe quelconque? Ce qui importe quelquefois beaucoup, non plus que l'atteindre et en tirer des sons à la même profondeur, surtout où les tissus sont mous et relâchés comme à l'abdomen.

Voici, de plus, ce qu'en pense un écrivain anglais Thorburn: "Percussion was employed until lately only as a diagnostic auxiliary, in determining chest affections. A zealous Physician, Mr. Piorry, has proscuted and extended the application of this mode of physical exploration, and has detected the relation subsisting between many nice sounds, and the physical conditions of the tissues, upon which practical distinctions of great value may be grounded. The majority of the refined diagnostic sounds, of which he treats in his *Procédé à suivre dans l'exploration des organes par la percussion médiate*," are attainable only through the medium of his acoustic instrument the *Pleximeter* or sound measurer, in thoroughly practiced hands."

L'on objectera peut-être, qu'il faut une longue pratique avec cet instrument, pour pouvoir s'en servir avec utilité. Il en est du plessimètre comme du stéthoscope, il faut une oreille musicale exercée et un tact délicat, qui ne s'acquèrent pas plus dans un traité de percussion, qu'on ne se familiarise avec les sons en étudiant les formes des différentes notes d'un cahier de musique. Çà ne s'apprend qu'au chevet du malade. Néanmoins, j'ai souvent vu des élèves qui s'étaient exercés un couple de mois au maniement du plessimètre, mesurer sur le cadavre le cœur, le foie, la rate, etc., en circonscrire les limites avec un crayon de nitrate d'argent, introduire de longues aiguilles tout autour de l'organe, puis faire l'ouverture du sujet et démontrer la justesse de leur diagnostic.

L. F. TAVERNIER.

[The writer of the Review upon WALSH on *Diseases of the Lungs &c.*, did not intend inculcating a neglect of the Study of the Pleximeter and Stethoscope, for he was the first in this country to teach their use practically in his Clinical Lectures; but he did advise his readers to become familiar with the detection of sounds by the *unaided ear*, and the eliciting of sound by the *unaided fingers*, seeing that the practitioner may be frequently called to cases of acute diseases of the lungs and heart, and being without his pleximeter and stethoscope may not be able to make a correct diagnosis, and then lose much time before he can commence the proper treatment. The value of the Pleximeter in the hands of Piorry has not been over-estimated by our talented contributor; for the writer has himself been a witness of the utmost miraculous tact with which its discoverer can detect the increase or diminution of the different organs

of the body, and the extent of effusions, &c., and he has, both by precept and example, shown to his pupils every year, with what accuracy these different points can be determined during life and verified after death. The Students, who have followed his Clinical Instruction, will recollect, that, in all cases, he has been in the habit of *mapping* out the situation, extent, and varying conditions of the diseased or misplaced organs, and they can corroborate the statement of Dr. Tavernier as to the great utility of this method of Clinical Examination.—R. L. M'D.]

ART. X.—*Infinitesimal Doses; a notice of Homœopathy and its doctrines.* By D. MACCALLUM, M. D., M. R. C. S., England.

THIS paper concludes a review of some parts of Homœopathy, the former portion of which was published in the three last numbers of the "*British American Journal of Medical and Physical Sciences.*"

We object to Infinitesimal doses—4thly. *Because the mind cannot form even an approximative idea of the quantity of medicinal matter said to be contained in each globule.*

This is a reason which requires no argument whatever in support of its correctness. The mere exhibition of the table of attenuations, found in nearly every work on Homœopathy, will satisfy every mind as to its truth. For what human intellect can have any idea of a fractional part of matter which requires a denominator containing sixty-one figures to express its quantity? Who can conceive of the one--1,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000th part of a grain of any substance? Yet this, which is called the thirtieth dilution, is recommended by Hahnemann and one class of Homœopathists as being by far the best dilution to administer in disease. Indeed Dunsford regards the retrogressive movement of Trinks, Greissilich and others towards the first dynamizations, as the reason why "the art has been deprived of one of its proudest boasts, that of curing *citò, tutè et jucundè.*" The following table exhibits the number of attenuations from *one drop* of the "mother tincture," with the fractional part of that drop contained in each attenuation, and the number of figures necessary to express each fractional part:—

First	attenuation.....	Hundredth part of a drop.....		3 figures	
Second	"	.....Ten Thousandth	"	5	"
Third	"	.....Millionth	"	7	"
Fourth	"	.....Hundred Millionth	"	9	"
Fifth	"	.....One Thousand Mill.	"	10	"
Sixth	"	.....Billionth	"	13	"
Seventh	"	.....Hundred Billionth	"	15	"
Eighth	"	.....Ten Thousand Bill.	"	17	"
Ninth	"	.....Trillionth	"	19	"
&c.		&c.			
Twelfth	"	.....Quadrillionth	"	25	"
Fifteenth	"	.....Quintillionth	"	31	"

Eighteenth attenuation.....	Sextilionth part of a drop.....	.....	37 figur.
Twenty-fourth "	Octillionth	"	49 "
Thirtieth "	Decillionth	"	61 "

One would imagine, after perusing the above, that Homœopathists would scarcely dare to tax the credulity of their followers with anything more preposterous. But we learn from the "*Concise view of Homœopathy*," published by the Irish Homœopathic Society, that *they* consider the thirtieth dilution as a very small advance, indeed, in the reducing process. "No distinct limit," say they, "can yet be fixed as to the degree of preparation, where the medicines, thus prepared, cease to shew medicinal effects when applied in disease. Some medicines, *e. g.* Sulphur, have been pushed to the *fifteen hundredth* and *two thousandth* degree of preparation, *and have exhibited undoubted and distinct medicinal effects.*" And, "This dynamical conveyance," says Karl Luther, "from one phial to another, has, however, been continued up to the 15th, 60th, 100th, even 1500th rarefaction, *and the medicaments thus prepared have been found powerful enough to cure the most obstinate disease.*"

To express the fractional part of matter contained in the fifteen-hundredth and two thousandth dilutions, it would require for the former a denominator containing 3015 figures; and for the latter, one containing 4020 figures!! And yet, men, having the reputation of being sane, state, with amusing gravity, that these dilutions have exhibited "undoubted and distinct medicinal effects;" and others, confessedly intellectual, are found, who give implicit credence to such wild and outrageous assertions. Surely, those latter must give their assent without ever bestowing one serious thought on the matter. If they would but write down some three or four thousand figures, and then endeavour to mentally grasp the mass before them, and form it into a definite idea; failing which, if they were to reflect, that the incomprehensible mass of figures represents *the fractional part of a grain or drop of some medicinal substance*, which fractional part is said to produce distinct symptoms, and to be of undoubted benefit when administered to a person labouring under disease, they could not but be disgusted with the utter charlatanry of the system which embodied such monstrous absurdities; nor could they ever after regard an apparently sincere and enthusiastic supporter of the doctrine of Infinitesimals, but as one, either shamelessly lost to all sense of honour and truth, or labouring under a defect of mental constitution, bearing a striking resemblance to the psychological condition of the monomaniac.

The two-thousandth preparation is not, however, the extremest point of exiguity recommended by Homœopathists; for, not willing to be exceeded by any who might follow him, Hahnemann directs, "if the

patient *is very sensitive*, and it is necessary to employ the smallest dose possible, and attain at the same time the most speedy results, *it will be sufficient to let him smell once to a phial that contains a globule the size of a mustard seed, imbibing the medicinal liquid attenuated to a very high degree.* After the patient has smelled to it, the phial is to be re-corked, *which will thus serve for years, without its medicinal virtues being perceptibly impaired.*"

Figures fail in this instance to give an expression to the quantity of remedial matter, which, emanating from the globule, impresses so powerfully the system of "*the very sensitive*," through the olfactories. We admit, that it is involved in mystery sufficiently deep, impenetrable and wonder-exciting, to cure at least nine-tenths of the ailments of "*the very sensitive*."

Homœopathists talk and write so very flippantly about the fifth, tenth, twentieth, and thirtieth dilutions, that many unthinking persons are apt to fall into the error of regarding them as containing slight, and easily conceivable, fractional parts of a medicinal substance. Some idea may be formed of the extent of the attenuation from the following: Lake Superior, according to the best surveys, is 400 miles long, 80 miles wide, and possesses an average depth of 900 feet. It contains, consequently, 1,387,407,605,760,000,000 cubic inches of water. There are, in round numbers, 300 drops of water in one cubic inch, which, when multiplied into the above, makes the number of drops of water in Lake Superior to be 416,222,281,728,000,000,000. Now, supposing *one drop* of a "mother tincture," or *one grain* of any medicinal substance, to be placed into, and equally diffused throughout every particle of that vast body of water; *four drops* taken therefrom, would be a Homœopathic dose of the "*tenth dilution* only; every four drops, in other words, would contain the hundred-trillionth part of the grain or drop placed in the lake for solution!!

If the *four drops* taken from Lake Superior were then placed in Lake Michigan, which is 320 miles long, 70 wide, with an average depth of 1000 feet, and which contains 323,728,441,344,000,000,000 drops of water, and in the same manner distributed equally throughout the mass, *three drops* taken from this Lake, would be the "*twentieth dilution*" of Hahnemann!

If *three drops* were next transferred from Lake Michigan to Lake Huron, which is 240 miles in length, 80 miles in breadth, and 1000 feet in depth, and which contains 277,481,521,152,000,000,000 drops of water: TWO DROPS from this lake would be the "*thirtieth dilution*," and contain the decillionth part of the drop or grain placed in Lake Superior!!!

That some of the leading Homœopathic writers are really ignorant of what they are writing about, when they treat of attenuations and dilutions, is evident from what Curie, one of the great authorities in Hahnemannism, says on page 67 of his "*Practice of Homœopathy.*" "But it *seldom happens that an entire drop of tincture*, even in the highest dilutions, as the 24th or 30th, is dispensed at one time." Seldom, indeed! Why the fabled tasks of Hercules shrink into nothingness, when compared with the feat of a Homœopathist taking "an entire drop of tincture in the 24th or 30th dilution." In truth, it is a thing altogether impossible, as there is not enough of water on the surface of the globe to administer it in. If all the water contained in the great chain of lakes had *one drop of a tincture* equally diffused through it, and a Homœopathic physician, residing in Montreal, wished to give "an entire drop of the tincture," *in the 12th dilution*, to any of his patients, he would merely have to request him to step down to the harbour, apply his mouth to the water, and drink the immense basins dry. When the patient had accomplished this feat—when he had swallowed the last cubic inch of water from the furthermost part of Lake Superior, then, and only then, could the practitioner make the boast of having administered "*an entire drop of the tincture*," *in the 12th dilution.*

The cubic contents of the earth have been estimated at 170,195,852, 160 miles, which number, when reduced to cubic inches, produces the sum of 43,290,686,955,191,229,480,960,000. Now, supposing that one cubic inch of sugar of milk is employed in the preparation of 5000 globules, a mass the size of this globe would be sufficient to form 216, 453,434,775,956,147,404,800,000,000 globules. The 15th *attenuation* of Hahnemann contains the quintillionth part of a grain; consequently, he who would desire to partake of *an entire grain* of any drug in the *fifteenth attenuation*, would be under the necessity of swallowing a mass of sugar of milk, *nearly five times the size of the globe he exists on!!* This is proved by the above calculation: for, if one grain be divided equally through a mass of sugar of milk of the same dimensions as the earth, each portion of that mass, equal in size to a globule, will contain the two-hundred-thousand-quadrillionth part of the grain, whereas, one grain divided to the 15th attenuation would form a Quintillion of globules, which is just five times two-hundred-thousand-quadrillions.

Wonderful as the capacity of the homœopathic patients for swallowing incredible things confessedly is, this, we imagine, would prove too much, even for their marvellous gullibility.

5thly—*Because the results of treatment by Infinitesimals prove their inefficiency.*

"*Tutò citò et jucundè.*" At length, then, that long desired, but

scarcely expected time—that period in the history of the practice of medicine, to which the aspirations of all the good and great of the profession in past times tended, *viz.*, perfection in the treatment of disease—has arrived. For has not the "immortal Hahnemann" declared, and has not the glad tidings been duly reiterated in joyous and triumphant strains by his followers, that the recognition, by any medical practitioner of "*similia similibus curantur*," and the doctrine of Infinitesimals, will enable him to restore to health *tutò citò et jucundè*, all those who labour under any one, or more, of the manifold ills that flesh is heir to? What a delightful field is here presented to the contemplation of every truly philanthropic mind! What a glorious vista, extending into the future, opens up to his mental vision! No more racking pains—no more sleepless nights—no more anxious watchings for the first faint trace of approaching day, or feeling of weariness and disgust with the glorious light of heaven. A few globules of the thirtieth or third attenuation, it matters not which, restores at once the diseased body to its pristine vigour and health. "When a proper application of the homœopathic remedy has been made, the disease which is to be cured, *however malignant and painful it may be, subsides in a few hours if recent, and in a few days if it is already of long standing.* Every trace of indisposition vanishes, scarcely anything is seen of the disease produced by the remedy; *and health is restored by a speedy and almost insensible transition,*" (*Organon aph.* cxliii.) So says Hahnemann and his followers. But alas! for poor suffering humanity; these fine sounding assertions are falsified even in their own writings. For, not only the treatment of their reported cases extends far beyond the allotted time, but also, the vast majority of the cases, consist of diseases which usually terminate, when left to the unaided powers of nature, in the times mentioned as having elapsed before a cure could be affected with the infinitesimals.

In preference to taking up and examining the cases published by Curie and Dunsford, we shall give the history and results of treatment of nine cases of disease, treated Homœopathically in the Montreal General Hospital by Dr. Rosenstein, a German, who first introduced homœopathy into Montreal. The notes have been furnished to us by a medical friend, who was appointed to observe the progress of the cases.

In the summer of 1844, at which time the experiments were tried, homœopathy was quite a new thing in this city; Dr. Rosenstein was then the sole representative of homœopathy. For his trial of the efficacy of infinitesimals, he was allowed to select his own patients—their diet was completely under his control; in short, every facility was afforded him by the visiting physician, Dr. Hall, and the resident medical officer of the establishment, to test fairly and honestly the value

of infinitesimals in the treatment of disease, with what success, the reader will be enabled to judge from a perusal of the following:—

Case 1.

Michael Dolan, aged 19, was admitted into the Montreal General Hospital, May 29th, 1844, labouring under intermittent fever.

"Had an attack to day—paroxysm came on at eleven o'clock, A. M. Dr. Rosenstein ordered 6 globules of Ipecacuanha to be given in divided doses, 2 globules every second hour. No tea."

May 31st.—Paroxysm to-day at 11 o'clock. Continue globules of Ipecac.

June 1st.—Patient "*thinks* nothing is the matter with him." Omit globules.

June 2nd.—Paroxysm as usual at 11 o'clock.

3rd.—Feels well; appetite good. 16 globules of Bryonia in divided doses—4 globules every fourth hour.

June 4th.—Paroxysm at 11 o'clock; experienced a pain in the abdomen during the continuance of the cold stage. Omit globules. Beefsteak and potatoes for dinner.

June 6th.—No paroxysm. At 4 o'clock, P. M., felt very weak, and experienced severe pains in the bones of the extremities. Six globules of sabadilla in divided doses—2 every second hour.

June 8th.—No paroxysm; suffers from pains in the back and limbs, is so weak, cannot walk across the ward floor. Port wine, four ounces. Soup.

June 10th.—Pains in his back, limbs and head, which increase at 4, P. M. Globules of Bryonia dissolved in water—a tablespoonful every hour.

June 12th—Pains in various parts of the body; pressure over the left hypochondriac region produces a sensation of pain. Discharged by Dr. Rosenstein, who stated, "that the weakness and pain he experienced was entirely owing to want of exercise." The man, however, feeling altogether unable to use even the slightest exertion, remained in the Hospital. On the 16th June, he had a severe paroxysm, much more severe than any of his previous attacks. On the 17th, he had another paroxysm. Dr. Hall now placed the patient under treatment, and on the 29th July he was discharged from the Hospital cured.

When it is considered that intermittent fever is a disease which homœopathists regard as being peculiarly susceptible to the operation of their remedies, and which they boast of, as affording in its treatment triumphant proof of the truth of their system, the above case can only be looked upon as a complete failure. The patient Dolan, was the se-

lected one of Dr. Rosenstein, from three persons with intermittent fever, who presented themselves for admission into the Hospital on the same day. He was young, and there existed no complication of the disease. The remaining two, who were older, and in both of whom complications existed, were treated by Dr. Hall, and discharged cured, respectively, on the fourth and seventh of June. Notwithstanding the advantages thus granted, not only did he entirely fail in curing the disease, but the disease actually became worse; the original *tertian* having degenerated into the *quotidian* type.

CASE 2.

James Powell, aged 17, was admitted June 21st, 1844, suffering from an attack of pneumonia. At noon on the 22nd, at which time he was placed under Dr. Rosenstein's care, his thorax was carefully examined, and the inflammation found to occupy the lower portion of the upper lobe of the right lung. Cough, dyspnoea; symptomatic fever; congestion over the molar prominences, &c., &c., were present. A few globules of phosphorus, (6th trituration) to be dissolved in eight ounces of water, and one tablespoonful to be given every hour. Grue for diet.

At four o'clock, P. M., he was ordered 16 globules of a conite in divided doses—four every third hour.

June 23rd.—At 10 o'clock, A. M., the general symptoms remained unabated in severity, and auscultation detected an increase of the disease.

2 globules of phosphorus to be laid on the tongue. A few globules of aconite to be dissolved in eight ounces of water, and a tablespoonful to be taken every hour.

At six o'clock, P. M., all the general symptoms had increased in intensity, and the physical signs indicated a fearfully rapid extension of the inflammation. Dr. Hall now thought it advisable to take the patient under his own charge. He immediately placed him under proper treatment, and on the 16th July he was discharged from the Hospital perfectly cured. When Dr. Rosenstein took charge of this case, he was told, that if symptoms of improvement did not show themselves in the course of twenty-four hours, the patient would be removed from his charge. To this he replied, that "24 hours were more than sufficient, as he would cure the young man perfectly in 12 hours at furthest."

At the expiration of 30 *hours*, however, from the time he commenced the treatment, the disease had assumed so serious an aspect, that Dr. Hall properly considered non-interference on his part would amount to culpability. This case must also be considered a decided failure.

Case 3.

Ellen Holmwood, aged 20, was admitted on the 1st June, 1844.

"Her skin is of a deep icteric hue; she complains of pain in the right hypochondriac region, which is increased by pressure; has a pain in the head; vomits frequently, the vomited matter being of a dark colour; bowels free; stools dark and fetid; urine quite yellow when placed in a white vessel; pulse 72, regular.

Dr. Rosenstein attended her from June 1st to June 14th, giving her, at various times, globules of cinchona, arsenic, sulphur, belladonna, pulsatilla, mercury, sulphate of lime, bryonia and rhus toxicodendron. As the Icterus, which remained unaffected by the treatment, had increased on the 13th. As she complained on the 14th of a severe pain in the head accompanied by dizziness; of pain in the right hypochondriac region, and of pain over the eyes. As the vomiting still continued; and the stools had become clay-coloured and extremely fetid, as, in short, the disease had steadily advanced in spite of the infinitesimals, Dr. Hall placed her under treatment on the 15th, from which time she gradually improved, and was discharged cured on 10th July.

Case 4.

Was a case of Typhus Fever, occurring in the person of a young man, aged 23, named Timothy Martin. He was admitted on the 10th June. The fever, which declared itself on the 4th June, ran through its course in the ordinary time, having subsided on the 1st July, and exhibited its usual phases, notwithstanding the variety of attenuations which were administered to check it in its course. Some very judicious but, at the same time, non-homœopathic, measures were adopted by Dr. R. in the treatment of this case, *e. g.*, cold applications to the head, when *great heat of head*, cerebral disturbance and flushed face existed. The patient remained in Hospital to be treated for Bronchitis, which was indeed detected on the 12th June by the stethoscope, but which remained unaffected by the treatment throughout the course of the fever, and was very severe at the time Dr. R. pronounced him completely cured.

Case 5.

Ann McGee, aged 27, was admitted on the 10th June. She complains of coldness of the surface; extremities are cold; experiences a sensation of heat in the stomach; tenderness over the abdomen, increased by pressure; vomits constantly; bowels regular; tongue furred; pulse 112.

This, which appears to have been a case of irritability of the stomach, owing to some cause not adverted to in the history, was treated by the non-homœopathic application of a succession of *hot poultices* to the abdomen, in addition to the administration of the globules. The poultices, which were changed every two hours, rest, and diet of bread and milk,

continued for four days, sufficiently account for this patient being discharged cured on the 14th June.

CASES 6 and 7.

Were two cases of Hysteria. One, a young girl, aged 18, suffered from great irregularity of the menses, and was subject to an hysterical attack about once in three months. She always recovered her ordinary health a few days after the subsidation of each fit. She was admitted on the 10th and discharged on the 14th June; the note for the latter day being "Is up, much better."

The second was an unmarried female, aged 22, who was admitted on the 3rd June, complaining of a variety of anomalous pains and aches in various parts of the body. Dr. R. treated her with globules of bryonia, aconite, belladonna, cantharides and cannabis. On the 8th June, she demanded her discharge, and was dismissed accordingly.

CASE 8.

Alice Early, aged 18, admitted on the 30th May, complaining of "pain in the stomach," was discharged by Dr. R. on the 8th June, carrying with her the "pain in the stomach." He requested her to call back in four or five days and report her condition.

CASE 9.

Ann Mulligan, aged 31, admitted on the 5th June, complains of constipation; bowels have not been opened for five days; has headache and pain over the eyes. To take 4 globules of pulsatilla in the evening.

6th June. Is not better; bowels still confined. To take 4 globules of pulsatilla this morning—2 of aconite dissolved in water at noon, and 2 of sulphur at bed-time.

7th June. No improvement; bowels still constipated. *To have an injection of tepid water.*

8th June. *Feels much better; the injection relieved the bowels.* Discharged at her own request. This patient suffered three days after being placed under treatment, from the presence of accumulated fæces in the intestinal canal, and found relief only from a non-homœopathic injection. So much for the efficacy of infinitesimals.

Did space permit, we might take up many other fundamental parts of the system of Hahnemann, and exhibit their absolute absurdity and falsity, such as his theory of chronic disease, &c., &c.

We forbear further remarks, however, as we have advanced the principal reasons, why we reject *in toto* the doctrine of infinitesimals, and why we look upon the system of medicine called homœopathy, as one deservedly meriting the contempt of every properly constituted mind in the profession.

Montreal, 12th March, 1852.

ART. XI.—*Cas de blessure de l'abdomen, protusion de l'Omentum, guérison rapide sans aucun mauvais symptômes.* J. N. BUXTON, M. D., Montréal.

Le 15 de Février dernier je fus demandé pour aller voir une femme du nom de Elisa S....., d'un tempéramment nerveux, et d'habitudes intempérantes, qui venait de recevoir un coup de couteau dans l'hypochoudre gauche. Elle présentait les symtômes suivants : couchée sur un lit à terre et à demie ivre, et souffrant très peu ; la blessure d'a-peu-près trois quarts de pouce de long, pénétrait l'abdomen et laissait dépasser une petite partie de l'Omentum, l'hémorragie était peu considérable. Après avoir coupé ce morceau d'Omentum qui tenait très-peu au reste, je rapprochai les lèvres de cette plaie par le moyen d'emplâtres adhésives, et mis une bande autour du corps. A mon patient j'ordonnai le repos et la diète.

Le lendemain, le 16, à ma visite, la malade avait passé une assez bonne nuit, et n'avait souffert aucun inconvénient de sa blessure, qu'un peu de fièvre que je remarquai alors ; malgré mon ordre elle s'était levée plusieurs fois, et persistait à ne garder le lit que de temps en temps.

Prescription : Nitrate de Potasse grs. x.
Tartre Stibié gr. ¼.
A prendre toutes les trois heures.

17. La fièvre que j'avais remarquée la veille a disparu, et la malade continue à ne se plaindre de rien, et aussi à ne point garder le lit. La plaie que je pensai aujourd'hui semble se fermer rapidement.

La prescription fut suspendue.

18. Elle continue bien, et la blessure que j'ai vu dernièrement est parfaitement guérie.

En conclusion je remarquerai que les blessures pénétrantes de l'abdomen qui sont considérées comme dangereuses, n'ont produit en ce cas aucunes mauvaises suites. Ce qui m'a fait couper ce morceau d'Omentum, c'est qu'il était déja presque séparé du reste, et qu'il aurait pu en se gangrènant, et agissant comme un corps étranger, produire une péritonite fatale. Le résultat m'a convaincu que j'avais raison d'agir ainsi spécialement comme il n'y avait aucun vaisseau assez grand pour donner lieu à une hémorragie interne.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

Lectures on Materia Medica, and Therapeutics, delivered in the College of Physicians and Surgeons of the University of the State of New York, By JOHN B. BECK, M. D., *late Professor of Materia Medica, and Medical Jurisprudence; prepared for the Press by his friend, C. R. Gilman, M. D., Professor of Obstetrics, &c., &c., New York*, S. S. & W. WOOD, 1851, 8*vo.*, *p. p.* 581.

THE work, of which the foregoing is the title, lately issued from the press of the Messrs. Wood of New York, is another addition to the numerous publications upon the subject of which it treats. Being posthumous, and its preparation for the press interrupted by the lamented decease of its esteemed author, the labour of correction, revision, and addition, devolved upon Dr. Gilman, and were we merely to state that this important duty has been faithfully performed, it would be no more than doing the latter an act of bare justice. While the circumstances, under which the publication is presented to us, are such as to disarm criticism of much of its severity, yet some analysis of it seems imperatively demanded.

One of the principal difficulties encountered by all writers on the Materia Medica, is the attempt to classify and arrange the articles employed as Therapeutic Agents, for the purpose of simplifying their study, and facilitating the acquisition of the knowledge of their properties. In the different sciences, bodies are grouped together, when a common relationship has been observed between them, consisting in some physical peculiarity or chemical property, and sub-divisions are effected, based upon some minor differences. These classifications in the natural sciences hold good, but in the application of the principle to the Materia Medica the greatest obstacles are encountered, arising as much from the theories of the day, as from the difficulty of appreciating with exactitude the physiological action of the medicines themselves. But, fettered by no theory, unbiassed by no particular dogma, it is, we apprehend, possible to construct a classification of Therapeutic Agents, if we adopt, as our basis, their obvious and most characteristic effects upon the system at large, or upon particular portions of it, bearing in view their primitive influence. Of such character is the classification of Dr. Thompson, which is not even alluded to in the work before us, who, arranging medical agents under the three heads of vital, chemical, and mechanical, has proposed the most scientific classification with which we are acquainted.

Dr. Beck arranges medicines primarily into six great classes:—1. Evacuants, 2. Depressants, 3. Narcotics, 4. Excitants, 5. Revulsive 6. Alteratives. In no part of the work is any meaning or definition

attached to the employment of these terms, and the reader's idea of them can only be gathered from the orders which have been placed under each. He subdivides the class of Evacuants into nine orders:—Emetics, Cathartics, Anthelmintics, Sialogogues, Diaphoretics, Diuretics, Expectorants, Emmenagogues, and Parturients. In the second class he has three orders:—Sedatives, Refrigerants, and Demulcents. The third class of Narcotics has no subdivision. The fourth class is subdivided into Stimulants, Antispasmodics, Tonics and Astringents. The fifth into Internal and External; and the last class Alteratives, into two, the Vital and Chemical.

Putting aside all critical examination of the orders contained in the first class of evacuants, although there is abundant exception to be taken to several, especially the classes of emmenagogues, and parturients, we will proceed at once to the second and third classes, in the former of which are enumerated sedatives, refrigerants, and demulcents, while the latter comprises no subdivision. The propriety of classing demulcents under the head of depressants seems more than doubtful, for, on examination, their operation on the economy cannot be considered in the slightest degree analogous to that of either sedatives or refrigerants; these two emphatically lower the powers of the vital system, and in a positive and direct manner; but we are at a loss to trace any such primary or even secondary effects accruing from the employment of demulcents, whose action, if physiologically viewed, will be found rather mechanical than vital, operating by diluting the mass of the circulating medium, and thus lessening the acrimony of the secretions.

But if a fair exception be thus taken to the assimilation of demulcents with sedatives and refrigerants, we are at a still greater loss to assign any satisfactory reason for the separation of the narcotics into a distinct class by themselves, apart from the depressants, when it will be conceded that depression of the vital powers is one of the most marked phenomena, attendant upon their exhibition. It is true that this depression is a consequence of a previous excitation, which is the less conspicuous in accordance with the amount of the dose, a feature unrecognized in the operation of sedatives, but still the phenomena comprehended under the term narcotism, characteristic of this class, indicate depression of vital action to a high degree, leading to the development of important secondary consequences, and are of themselves sufficient to have amalgamated this class as an order under that of the depressants.

Observations of a similar character may be urged in reference to the orders comprised under the fifth and sixth classes; and we therefore cannot avoid the reflection, that in his essay in classification, the author has by no means improved upon the past attempts, but has carried us back in this respect to the times of Cullen, Murray, and Young.

In the details of the work the author has brought to bear those keen perceptive powers based upon practical experience, for which he was so distinguished, and in the application of the various classes to diseases, he has enunciated most judicious rules, beneficial as well to the practitioner as to the student.

Dr. Gilman has added a chapter on anæsthetics. The observations are brief, yet consistent with the general plan of the work, which seems to have been intended rather to serve as a text book, than as an elaborate dissertation on the subject of which it treats. As a matter of some importance to our country subscribers, who may occasionally be required to avail themselves of the employment of chloroform, we subjoin the following extract, being

RULES FOR THE ADMINISTRATION OF ANAESTHETICS.

"1. The patient should not take food immediately before the operation. 2. The mind should be as far as possible calm and composed. 3. Quiet around is of the utmost importance; loud talking, addressing questions to the patient, &c., are all likely to interfere with the production of the anæsthetic state. 4. As to how rapidly the patient should be hurried through the state of excitement, there is difference of opinion, and a different rule should prevail as the agent is ether or chloroform. If ether is used, the stimulation is often troublesome, and the deeper stages of narcotism not readily produced. We ought therefore to hurry forward the process; place the cupped sponge over the nose and mouth, not pressing on the skin, but quite near, and urge the patient to take free inspirations, let them follow each other as rapidly as is consistent with their being *full* and *deep*. As to chloroform, Professor Simpson advises that the patient should be plunged as rapidly as possible into complete anæsthesia. This is not the course I would recommend; I think the practitioner will do better to feel his way a little, and allow the effects of the agent to develop themselves gradually. There will every now and then be trouble with the stimulating effects, but there will be less danger. 5. Care should be taken that the supply of atmospheric air is at all times adequate. There is little doubt but that several of the fatal cases depended on an inadequate supply of air. 6. Watch the case from the first inhalation, till consciousness and sensibility have completely returned. One person should in all operations have charge of the anæsthetic, and he should *think of nothing else*. In one fatal case, the attendant, who should have watched the patient, was looking at the operation, *and the man died*. The person who has this charge should keep his finger on the pulse *every single moment* of the time; not one beat should the heart give that his finger does not take note of; the

moment the pulse begins to flag or flutter, the inhalation should cease, and a puff or two of fresh air be blown into his face. As to the degree to which the effects should be carried, it will differ in different cases. In natural labour we need ordinarily go no further than to obtund pain, and this can generally, I think, be done without disturbing consciousness. In surgical operations, complete relaxation of the muscles, and profound sleep is generally required. This state, however, must be watched, and when the breathing becomes stertorous, the inhalation should be suspended. If the breathing is irregular or interrupted, the danger is imminent, and every means of keeping up respiration should be resorted to. Artificial respiration is the sheet anchor in such cases, and I have known great danger removed by prompt and continual artificial respiration. Every thing will depend on the coolness and self-possession of the operator. 7. When the patient is allowed to emerge into consciousness, every thing that can startle or shock should be avoided, and the brain allowed gently to recover its equipoise. Ammonia, oxygen, galvanism, &c., &c., have been proposed as remedies in excessive anæsthesia. They amount to nothing. Artificial respiration is the alpha and the omega."

To these plainly expressed directions, we would also add the following, that the anæsthetic should be exhibited in the recumbent posture if possible: Our own experience is closely allied with that of many recent writers on the subject:—convulsions are extremely apt to supervene when the anæsthetic is exhibited in the semi-erect or sitting position; and these are, therefore, postures which should, if possible, be avoided.

The manner in which the work is brought out, is highly creditable to the establishment of the publishers, and, as a whole, is well worthy of constituting an integrant portion of every medical library.

Illustrated Manual of Operative Surgery and Surgical Anatomy. By M. M. C. L. Bernard, D. M. P. and C. H. Huette. Edited, with notes and additions, and adapted to the use of the American Medical Student, by W. H. Van Buren, M. D., and C. E. Isaacs, M. D. New York, Balliere & Co., 1852.

We have received from our enterprising fellow-citizen, Mr. Dawson, the first part of the above work, which is got up in a manner, superior to any thing we have seen issue from the American Press. It is intended for the student and junior practitioner; but, we doubt not, it will be found equally acceptable to the senior practitioner. Each operation is clearly, yet fully, described, and alongside of the drawing, representing the mode of operation, is a beautifully executed coloured representation of the

Surgical Anatomy of the parts. The present part contains 84 pages of letter-press, and 30 coloured lithographs—for which the small sum of 16s. 6d. is charged—the plates alone being worth twice the amount. We have not much to thank the American Editors for in the way of notes and additions, for they have only added two very unnecessary ones. We throw this out as a suggestion; for they may rest assured, that British Surgeons, in general, are but slightly acquainted with the rapid progress of American Surgery, and we know of none better qualified for enlightening their brother practitioners on this subject, than the accomplished Surgeons who have undertaken the translation and editing of this treatise. Mr. Dawson is the agent in this City for the sale of the work, and we would strongly recommend our brethren in the country districts to avail themselves of this opportunity of procuring, on such favourable terms, a work on Surgical Anatomy and Operative Surgery.

The Elements of Materia Medica and Therapeutics, By JONATHAN PEREIRA, M. D., F. R. S. and L. S., *third American edition, enlarged and improved by the author, &c., edited* By JOSEPH CARSON, M. D., *Professor of Materia Medica, and Pharmacy in the University of Pennsylvania, &c. Vol.* 1, *Philadelphia. Blanchard & Lee*, 1852, 8*vo. p. p.*, 838.

OF a work so generally accepted by the profession of both continents, little requires to be said. The present edition, issued by Messrs. Blanchard & Lea, is printed with the approval of the author, and it embodies all the recent discoveries, which have taken place in reference to the subjects of which it treats, since 1849, and is furthermore enriched by the labours of the American editors in the same field. An analysis of such a publication is out of the question. It is a book for reference, valuable both to the student as a vade mecum, and to the practitioner; and emphatically is the most comprehensive, as well as the best treatise, on the subject in our language. We long for the appearance of the second volume, of which the present is but the instalment, which, according to the publishers, will appear in July or August next.

Medical Lexicon—A Dictionary of Medical Science, containing a concise explanation of the various subjects and terms of Physiology, Pathology, Hygiene, Therapeutics, Pharmacology, Obstetrics, with the French and other Synonyms, &c. By ROBLY DUNGLISON, M.D., *Professor of the Institutes of Medicine, in Jefferson Medical College, Philadelphia, 8th Edition revised and greatly enlarged. Philadelphia*, BLANCHARD & LEA, 8*vo. p. p.* 927.

THE best proof of the value of a publication is the rapidity of its sale, or the demand for it, and this is truly the case with reference to the work which

we are now noticing. It is scarcely two years since the seventh edition was published, and we are now called upon to chronicle the advent of the eighth, enlarged and enriched by the addition of about 4000 terms to the 9000 comprehended in the last. It is a work of labour, and removed beyond the sphere of criticism, except that which attaches to commendation. It should be in every medical library; and is the best and most perfect lexicon of medical terms in the English language. Familiar with all, we pronounce it the best.

SCIENTIFIC INTELLIGENCE.

SURGERY.

Case of Fracture of the Skull, with Loss of a Portion of the Substance of the Brain; Recovery. By JAMES C. FITCH, M. D.

ON the 19th of July, 1849, George D. Fitch, aged eleven years, son of the writer, was thrown from a horse, and after regaining the erect position, was kicked by the animal on the head. This occurred about seven o'clock, P. M.

He was borne to his residence perfectly insensible, and in a state of complete prostration. On examination, there was found a compound comminuted fracture of the skull, at the superior part of the junction between the right parietal and temporal bones; a portion of the bone, about two and a half inches in length by about an inch in breadth (or the width of the horse's shoe), having been driven in upon the brain.

The hemorrhage was profuse, and in dressing the wound a portion of the brain came out. Reaction did not take place until four o'clock the next morning, patient still remaining in a comatose state.

July 20th. Dressed the wound with Dr. W. P. Clark,* of Belvidere, when another portion of brain came out.

21*st*. In dressing the wound to-day, a portion of the brain one inch in length protruded, but was confined by the membranes. Patient manifested sensitiveness when this was touched; but in other respects continued in the same insensible condition as heretofore. Not able to swallow anything. The strength of two or three persons is required to keep him on the bed, and he lies still at no time, more than three minutes.

* To Dr. W. P. Clark, my friend and more than brother, I would here tender my grateful acknowledgments for the promptness with which he responded to my call, and for his punctual and daily attendance for more than three weeks (though living at a distance of ten miles), as well as for the consolation he afforded me in my affliction.—J. C. F.

25*th*. Continues much in the same condition. Put a little water in his mouth, part of which ran out. A little seemed to go down the throat, and gave rise to strangling and spasms, resembling somewhat spasms of hydrophobia.

27*th*. Opened his eyes for the first time since the accident, and took notice of a glass of water in my hand, and seemed desirous of drinking, but was unable to swallow. An hour afterwards, he again opened his eyes, and the water was offered him, of which he seemed to swallow a little. In another hour, he, by looks, expressed a desire to drink, and on presenting him the glass, he bit a piece from it, which he held so firmly in his mouth that it was with great difficulty extracted. Up to this time he had received no nourishment whatever, except from enemas of arrow-root and milk.

28*th*. Looked up and spoke a word indistinctly—being the first word he had spoken since the accident. For the first time he seemed to recognize his friends. He also to-day received nourishment into his stomach for the first time, taking every two hours a teaspoonful of milk, thickened with arrow-root; this was continued until Wednesday, August 1st, when one cracker in twenty-four hours was added to the above. This plan of giving nourishment was continued till Friday, August 3rd, when he rejected all that had previously been given by the mouth, showing that the stomach had been incapable of performing its function. The act of vomiting exhausted him to such a degree that we feared the vital force was expended. A few drops of strong brandy were given every few hours, and in the course of two days he had regained his former position, and from that time the nourishment given him by the mouth seemed to be digested without difficulty.

Aug. 9*th*. Patient having had no discharge from the bowels since the accident, at the recommendation of my friend, Dr. Clark, a suppository was given, which had the desired effect. The wound looks well. Two pieces of bone were removed. Patient seems to be perfectly sensible, and, though he has great difficulty in articulating, converses on ordinary topics. He has no recollection of what has passed during the last few weeks, expressing by his looks much astonishment, when informed of the length of time that has elapsed. Has the appearance of just having awakened from a sound sleep.

13*th*. Wound looks well. With assistance, he got up and walked across the room.

15*th*. Appetite and digestion very good. Bowels moved daily by injections.

18*th*. The wound still improves, and with it his general health. Experiences much difficulty in articulating some words. Recognizes per-

sons and things, but cannot tell their names, though when the name is once repeated, he retains it. For instance, a friend called to see him; and though he seemed by his looks to recognize him, he could not call his name until it was repeated to him, after which he had no difficulty as far as that particular individual was concerned. All eatables he calls *bread*, until he hears their names called. When he wishes an article of which he cannot call the name, he can describe it and compare it to things of which he does know the name, so that he can be understood.

His loss of memory seems also to involve the memory of things as associated with taste. For instance, being very fond of raspberry brandy, he desired some, but not being able to call it by name, he succeeded in giving his mother to understand that it was kept on an upper shelf in a cupboard in the room, and with considerable difficulty made her understand that it was in a bottle. Fearing the stimulant effect of the brandy, it was easy to satisfy him with a little sweetened water, which he supposed was the raspberry brandy.

Sept. 14*th.* Wound continues to improve. Patient has been out riding. Recollects the circumstances connected with the accident, and relates them very correctly. Continues to experience difficulty in articulating some words. Still recognizes persons and things without being able to call their names.

Oct. 19*th.* Wound slowly healing, discharging a large quantity of pus daily. Complains when he coughs. Memory, and the difficulty in articulating words, improving.

Nov. 19*th.* Wound still discharges. Complains of weakness in his *right* arm. Very active; health good; articulation improving. Goes to school. Has difficulty in remembering some of the letters of the alphabet, and some words. Has difficulty in forming some of the letters in writing. His memory fails in mathematics, but when one example is performed for him where he left off in algebra, his knowledge is revived, and he can perform other examples without assistance.

25*th.* In dressing the wound, a portion of bone came out.

Dec. 3*rd.* Wound still discharging. A small piece of bone came out.

19*th.* Five months since the accident. Wound still discharging. Two small pieces of bone came out.

Jan. 19*th*, 1850. Wound still discharging.

March 19*th.* Wound discharges a great deal. Health very good.

May 9*th.* Extracted a piece of bone from the wound which caused a profuse hemorrhage. This is the largest piece of bone that has come away.

June 13*th.* Extracted a piece of bone.

July 19*th.* One year since the accident. Wound still discharging.

A piece of bone looks as if it would come away soon. Enjoys good health, learns well, is active, and in all respects mentally sound.

Sept. 1*st.* Wound seems closed. 15*th.* Wound discharging much matter. 16*th.* Extracted a portion of bone.

Dec. 20*th.* Extracted a large piece of bone, after which the wound closed up and is perfectly sound to this day, Nov. 16, 1851.

Remarks on the above Case. By S. W. BUTLER, M. D.

THE rare occurrence of severe injuries to the brain, and the very great danger that necessarily accompanies such lesions, when they do occur, combine to throw around them an interest which attaches itself to no other species of injury. Until the celebrated Perceval Pott, by his judicious teachings and writings, completely revolutionized the whole plan of treatment in injuries to the brain, they were much more frequently fatal than at present. Perhaps in no one department has modern surgery achieved a greater triumph than in this. It is a popular notion, and even some of the profession are involved in it, that injuries to the brain, more especially where any portion of its substance has been lost, necessarily involve loss of life.

Such, indeed, was generally the case before the observations and untiring energy of Pott, and others of his time, introduced more rational methods of treating such injuries than had been pursued before. Yet we doubt whether the credulity of even a Pott would not have been somewhat taxed, had he read reports of the success in treating some cases of injury to the brain which have occurred in modern times. Doubtless some of our readers may remember a case published two or three years since, by Dr. Harlow, of Cavendish, Vermont, in which a man recovered after having had an iron bar or "tamping-iron," three feet seven inches in length, one and a quarter inches in diameter, weighing thirteen and a quarter pounds, driven "with a crash" through his brain high into the air, and thrown several rods beyond him, where it was picked up "covered with blood and brains!" This is no fancy picture, drawn to task credulity, but a well authenticated fact. The patient, Phineas P. Gage, is probably still alive, and retains in a perfect degree his mental powers. Indeed, at no time during his recovery, was his mind seriously affected. In this case, the iron bar entered near the angle of the lower jaw of the left side, and passing upwards, involved the left eye, so as ultimately to destroy vision in it, and finally passed out near the centre of the frontal bone just in advance of the coronal suture. It, therefore, in its course, involved only the anterior lobes of the brain, consequently, not necessarily involving those parts, whose peculiar func-

tion it is to govern the movements on which life is absolutely dependent. Probably there is not on record a case of recovery from such an extensive lesion of the brain as the one just mentioned.

Indeed, though the writer has examined a number of surgical works, he has not succeeded in finding the report of but one other case of injury to the brain, with loss of a portion of its substance, followed by recovery. This was published by a Dr. J. Snyder, of Va., during the last year, in the *Stethoscope, or Virginia Medical Gazette.* Two cases, published by the late Prof. Sewall, of Washington city, are referred to by the American editor of *Cooper's Surgical Dictionary,* but we have not succeeded in procuring the Journal containing them.

So far as the writer has examined, Pott neither reports nor speaks of a case where any portion of the substance of the brain was lost. In the case spoken of above, reported by Dr. Snyder, the patient, a lad about eight years of age, was run over by a horse, and thrown against a stone, which caused an extensive fracture and loss of a considerable quantity of the cerebral mass. These, with the rapid recovery, were the principal points of interest mentioned in this case. The patient recovered from the effect of the injury in less than four months.

In the case reported above by Dr. Fitch, there are several points of very great interest in a physiological, as well as a pathological, point of view. We have neither time nor space to do more than refer to them now, leaving our readers to comment on them at leisure.

As the injury received was by a blow on the side of the head, it is evident, that aside from the fracture and depression caused by the blow, there was a possibility of another effect, viz.: extravasation on the opposite side, the result of what the French term *contre coup;* and that this did occur, seems probable from the fact that there was, as long as four months after the receipt of the injury, a weakness in the patient's *right* arm. Another thing worthy of attention is the fact, that the jactitation and the spasmodic action in the fauces, when the patient attempted to swallow fluids, bore some resemblance to the morbid nervous action of a patient laboring under an attack of hydrophobia. It is evident, that the nervous influence supplied to the stomach, was insufficient to enable it to perform its function for the period of two weeks, during which time the patient was nourished wholly by enemata of milk and arrow-root; and that the lower bowels readily assumed the duties thus thrown upon them, is proved by the fact that, although these injections were used daily from the time of the accident, yet it was full three weeks before there was any discharge from the bowels, when a purgative suppository was used with success.

Another interesting feature in the case is, the great length of time that elapsed before all the fragments and spiculæ of bone were discharged, viz., one year and five months. During all this time, although an exhausting drain was kept up, and that so near the brain, the patient improved constantly both mentally and physically.

But there still remains the most interesting feature in the case, viz.: the effect of the injury on the patient's mind, and on at least one of the organs of special sense—the taste. Why was it that the patient retained the memory of the *countenance* of an individual while he had forgotten his *name?* On what physiological principle was he able to describe the shape, size, appearance, and position of an article he desired, while he could not call it by name? Why did he find it so difficult to remember the names of *some* letters of the alphabet, while he had no difficulty whatever with *others?* To say, simply, that he had lost the memory of *names*, is by no means a sufficient answer to these inquiries. It would seem too, that the effect on the *taste* involved not the *loss* of that sense, but the inability to remember the taste belonging to a particular article.

The writer, not feeling competent to undertake the solution of the interesting questions started in this connection, will here bring these already too extended remarks to a close, with the hope that others may be led to think and observe on the subject, should they have the opportunity to do so, and record minutely such facts as may present themselves.

[We publish the foregoing case, because it is a remarkable instance of recovery from a most serious accident; but we must remind our readers that the practice of leaving loose portions of fractured bone, to cause suppuration of the brain, is by no means to be imitated.—*Eds.*]

Case of Imperforate Anus. By CHARLES DUNHAM, M. D.

I WAS called, on the evening of Oct. 5th, to visit a child of a boatman—on the second day of its birth. I found the child very fretful and uneasy—the abdomen was much distended and discoloured, and, from information of its mother, the fœces had been frequently vomited up through the day. I immediately suspected the nature of the case, and, upon examination, found nothing but a slight indentation to mark the orifice of the anus. As an operation was inevitable, I determined to perform it immediately. Having procured a bistoury, I made a longitudinal incision, and extended it upwards in the direction of the os sacrum, until I reached a cavity. Upon withdrawing the instrument, to my delight, the meconium flowed copiously. The child was placed

in a warm bath for a few minutes, after which, a tallow bougie was introduced to prevent adhesion. The little patient seemed much relieved, and dropped into a pleasant sleep. The bougie was continued for a few days, with the occasional use of small doses of castor oil, and the child was so nearly recovered in the course of a week, as to enable its parents to proceed on their journey. I had some apprehensions that the sphincter muscle might be destroyed, but, having had an opportunity of inquiring a few days since, I find that no difficulty has arisen from that source, and the child is in good health.—*New Jersey Medical Reporter.*

New Operation for Stricture.—By Mr. SIMON.

WHERE it is of importance rapidly to relieve a distended bladder, depending upon impassable stricture, Mr. Simon has, in several instances, performed a very simple and effectual operation, which has the additional advantage of being equally adapted to cases of simple permanent stricture and those complicated with retention. Mr. Simon passes the finger of the left hand into the rectum, and feels for the prostate gland: so soon as he has well made out the position of this, he plunges a narrow bistoury into the raphe, about an inch anterior to the rectum, and carries the point of it towards the tip of the finger; the back of the knife is turned towards the finger, and thus the urethra is at once reached, posterior to the stricture. This immediately relieves the retention, and he then allows the stricture time to dilate a little, which it does when the pressure is taken off from behind, and then it can be dilated by the bougie, &c. Mr. Simon has performed this operation in several cases with success. The first case of all was that of a man who was sinking rapidly, the bladder distending, the tongue growing brown, and typhoid, great anxiety, &c., and who would have died before the ordinary operation of cutting down upon the stricture could have been executed. It was accomplished in a very short time, and was quite successful.—*Medical Gazette*, Dec. 20, 1851.

On the Local Treatment of Suppurating Joints.

SURGEONS in general are averse to making incisions into joints, under a vague impression that the contact of air is prejudicial. The fallacy of such impressions so clearly demonstrated by Mr. Gay, is also exhibited by Mr. Solly, in some clinical remarks or injuries of the knee-joint. He says:—

With regard to the local treatment, I have no hesitation in recommending a free opening into the joint, where there is extensive suppuration, and much constitutional irritation in consequence ; and on this subject I think the opinion of Mr. Rutherford Alcock of infinite value, from his great experience. He says:—

" The great object, then, is, firstly, to prevent the deposit and accumulation of matter in the articulation, which, notwithstanding all that has been said of its bland, innocuous nature, previously to the admission of atmospheric air, quickly erodes all the articulating surfaces, in the generality of cases ; I have seen exceptions, but they are few ; and, secondly, to prevent the matter from burrowing among the muscles extending upwards and downwards, thus involving the whole limb in a suppurative and disorganizing disease.

" No sooner, therefore, is suppuration established, than it becomes necessary to devise the best means of obtaining its evacuation, and to secure its draining off, in proportion, or as fast as it forms. Any fears of the contact of air, I cannot but think, are out of place. The matter will do more mischief by being allowed to lodge. Counter openings in pendant positions, and free incisions, either in the vicinity, or, if necessary, through the capsule, should be promptly and boldly practised, together with such regulated pressure, above and below the articulation, as the state of the limb may indicate and allow, in order to counteract the tendency to spread and burrow."—*Lancet*, January 10th, 1852.

Staphyloraphie chez les Enfants.

M. Sédillot adresse une note sur la possibilité et les avantages de la staphyloraphie chez les enfants d'après les règles de sa nouvelle méthode.

Toutes les personnes opérées de la staphyloraphie, dit l'auteur, ne recouvrent pas le libre exercice de la parole. Leur voix reste souvent nasonnée, et la prononciation de certains mots est difficile et vicieuse.

Cet état s'explique par l'inapitude des malades à bien parler, et par la malformation de leurs organes.

Si l'on n'a pas appris une langue dans son enfance, seule époque de la vie où les prononciations s'acquièrent avec une merveilleuse facilité, il est fort rare d'arriver jamais à perdre tout accent d'origine étrangère. Non-seulement la voix se refuse à exprimer nettement certains sons, mais l'oreille ne les distingue pas ; et si un maître exercé nous les fait entendre, nous les répétons tout différemment sans le soupçonner.

La plupart des opérés de la staphyloraphie se trouvent dans les con-

ditions semblables. Ils doivent apprendre leur propre langue qu'ils n'ont jamais su prononcer, et ils éprouvent les mêmes difficultés que pour une langue étrangère.

On parvient à leur faire exprimer assez clairement les mots sans nasonnement marqué ; mais dès qu'on n'est plus là pour les guider, la prononciation redevient irrégulière et défectueuse.

C'est là un des inconvénients de l'âge avancé auquel on a pratiqué la staphyloraphie jusqu'à ce jour, et il était fort à désirer que l'on pût exécuter cette opération sur des sujets plus jeunes et plus aptes à en recueillir les bénéfices.

Les diverses parties d'un même appareil se produisent et se développent dans un état de dépendance réciproque, et les vices d'organisation de l'une d'elles impriment des motifications plus ou moins profondes aux organes congénères.

Les cavités buccale et nasale subissent cet ordre d'influence chez les personnes atteintes de division congéniale du voile du palais. Les ailes du nez, pour nous borner à cet exemple particulier, se resserrent et tendent à rétrécir l'orifice nasal dans tous les cas où l'air doit être retenu pour la formation de la parole.

On conçoit dès lors que plus on aura retardé la staphyloraphie, et moins les malades en profiteront en général, puisqu'ils auront ensuite à lutter contre des vices d'organisation très-difficile à corriger.

L'indication à remplir consisterait à pratiquer la staphyloraphie dès les premières années de la vie, et il n'est pas sans doute impossible que l'on y parvienne.

Jusqu'à ce jour les difficultés du MANUEL OPÉRATOIRE, celles encore plus grandes de la réunion immédiate du voile du palais, et la force de volonté nécessaire aux malades pour rester plusieurs jours sans même avaler leur salive, avaient fait retarder l'opération jusqu'à l'âge de 15 à 16 ans ; et pour plus de sûreté les parents exagéraient ce retard, et pouvaient se croire fondés, d'après l'opinion commune, à espérer ainsi de meilleures chances de succès.

C'est une erreur qu'il importe de détruire aujourd'hui que nous pouvons opérer beaucoup plus tôt les malades en suivant les règles de notre méthode ; et j'attendais avec impatience le moment d'en établir expérimentalement la preuve.

Cette occasion m'a été dernièrement fournie par un de mes honorables collègues et amis, M. le docteur Schneider, qui m'a appelé à traiter une jeune enfant de 10 ans atteinte de division congénitale et complète du voile du palais.

La staphyloraphie, pratiquée le 12 novembre de cette année, réussit parfaitement, et la parole est déjà devenue (25 décembre) plus claire et

plus nette qu'elle ne l'était au bout de plusieurs mois chez un jeune comte allemand, âgé de 25 ans, que j'ai opéré cet été.

La staphyloraphie rendue applicable à l'enfance et donnant des résultats plus avantageux et plus certains, nous paraît constituer un véritable progrès, et nous aurons l'honneur de continuer à communiquer à l'Académie les faits qui confirmeront ces remarques.—*Gaz. Méd. de Paris.*

On Operations for Impassable Stricture of the Rectum. By J. B. CURLING, Esq.

Two operations are recommended: one, the opening of the colon in the left groin; the other, opening the bowel in the left lumbar region. Mr. Curling thus speaks of their relative merits:—"A careful consideration of the advantages and disadvantages of the two operations, leads me to give the preference to the former. I do not ground this conclusion upon the tables of Amussat and Vidal, because I do not attach much value to them. The cases of Littré's operation are not only limited in number, but in several of them the colon was not opened in the left groin, the division of the peritoneum being the only circumstance in common. Nor do the tables afford information of the period of constipation, or of the extent to which the viscera were disturbed in the operation. Callisen's operation is not only difficult of execution, but the wound is necessarily of large size, especially in stout people. But it is not so much for these reasons that I am indisposed to adopt it, as in consequence of the operation leaving the patient exposed, afterwards, to risks and annoyances, which are in a great measure avoided when the colon is opened in the groin. Thus I find, in the published account of several of these cases, that the artificial anus in the loin had a strong disposition to contract, so as to interfere with the passage of the fæces, and that repeated dilatation was necessary to secure the patency of the opening. It is also extremely difficult to adjust any apparatus to prevent the continued escape of flatus and fæces; and as the orifice is without the observation of the patient, he becomes dependent on the assistance of others. These serious inconveniences, if experienced at all, are much less so when the aperture is in the groin. The patient can attend to the part himself. The aperture does not show the same disposition to contract, and it admits of being closed by a well-adapted truss. These advantages, so important to the comfort of the patient, are by no means counter-balanced by any increased risk in opening the peritoneum. The operation is easily performed, and as no exploratory attempt is necessary to relieve the obstruction, a very small opening in

the peritoneum is sufficient for the object in view. Even Callisen's operation is not entirely free from risk of peritonitis from disturbance of parts; and the magnitude of the incision probably renders the danger to life, from its performance, quite as great as that resulting from the operation in the left iliac region, carefully performed.

"The abdomen may be opened in the left iliac region by a perpendicular incision about three inches in extent, commencing two inches above Poupart's ligament, and an inch external to the epigastric artery. The fibres of the abdominal muscles being cut across, will help to keep the wound open. The peritoneum being divided, the distented colon will immediately protrude at the wound. A curved needle, armed with a silk ligature, being passed though its coats above and below to prevent its receding when emptied, the bowel may be opened for the space of an inch between the retaining ligatures."—*Observations on Diseases of the Rectum*, p. 106.

Five Calculi Removed by Lithotomy, each containing a Field Bean as a Nucleus.

THE following remarkable case is related by Dr. Mackenzie:—A labourer, aged 46, was admitted into the Edinburgh Infirmary with the usual symptoms of stone. On sounding, the presence of more than one calculus was ascertained. The lateral operation was performed on the 13th of October, and five stones were removed. The prismatic shape and uniform size of these were remarkable; but the presence of a foreign body as a nucleus was not suspected until the stones had been dried by evaporation, when a hard substance was heard to rattle loosely within them. On making sections of these calculi, the nuclei were found to be horse-beans. The calculous incrustations consisted of the triple phosphates.

The history of this remarkable case is as follows;—About the end of March of the present year, after a carousal with two fellow-labourers, with whom he lodged in a barn attached to his master's farm, a quarrel arose, in which he was knocked down and overpowered by his two companions. From the injuries he received, and from his state of intoxication, he was rendered senseless, and, whilst in this condition, the following cruel trick was perpetrated on him by his assailants:—

He was stripped of his clothes, and a quantity of beans (the common field or horse-beans, used for feeding cattle) were thrust into his mouth and into the rectum; and lastly, several were introduced into his urethra. The manner in which these found their way into the bladder is unknown,

but it is probable that several were introduced, one after another, into the orifice of the urethra, and then pushed back along the canal by the pressure of the fingers on the penis and perineum.

On the following morning he was found in a state of insensibility, with his genital organs covered with blood. His companions had made off, and have ever since escaped detection.

A number of beans were vomited, and passed *per anum* on the day following the assault, and during this and the subsequent day he suffered great pain in voiding his urine, which was mixed with blood, and contained several fragments of broken beans.

He was confined to bed for some days, but at the end of a week he had nearly recovered from his injuries, and his urinary symptoms had considerably abated in severity.

From that time forward, however, he continued to suffer more or less severely from the usual symptoms of stone in the bladder, which were well marked at the time of his admission into the hospital.—*Edinburgh Monthly Journal*, Jan. 3, 1852.

PATHOLOGY AND PRACTICE OF MEDICINE.

Etude expérimentale sur la Suppuration Bleue et recherches sur la Pyogénie et sur la Composition du Pus.

M. PETREQUIN adresse un mémoire sur la suppuration bleue avec des recherches nouvelles sur la pyogénie et sur la composition du pus. Voici le fait qui a servi de point de départ à ces recherches elles-mêmes.

" Le 31 juillet 1851, Modeste M***, âgée de 16 ans, ouvrière aux Brotteaux, près Lyon, est apportée à l'hôpital pour un écrasement du bras gauche tout entier. Le sacrifice du bras parut inévitable, mais la famille ne s'y décida qu'après que la gangrène se fût emparée d'une partie du membre. Le 7 août, je pratiquai la désarticulation de l'épaule..... Ce ne fut que vers le 19 août que les pièces de pansement commencèrent à offrir une coloration insolite, d'une teinte verte, tirant sur le bleu ; le phénomène continuant à se reproduire, j'entrepris, le 23, une série d'expériences pour en découvrir le mécanisme et la nature.

" Mon premier soin fut de recueillir du pus pour le soumettre à l'analyse microscopique ; le 24 août, je priai M. le docteur Desgranges, qui s'est exercé à ce genres d'études, de vouloir bien en faire l'examen. Ce qui résulta de ces recherches, ce fut que les globules et les autres corpuscules observés dans ce cas, ne différaient ni par leur nombre ni par leur figure de ceux qui caractérisent le pus de bonne nature.

" Il fallait donc diriger mes recherches d'un autre côté ; je m'occupai

d'abord de bien préciser les caractères physiques du pus et des colorations vertes ou bleues. Une première distinction me parut devoir être faite entre la couleur du pus et celle des pièces d'appareil : le pus lui-même n'était pas bleu, il offrait une teinte verte, tirant sur le gris-verdâtre ; pour la consistance, il se rapprochait du pus crémeux, il était d'ailleurs fétide et nauséabond.

" Les pièces de pansement seules étaient bleues, et encore ici devait-on distinguer deux teintes, l'une plus profonde, sensiblement verdâtre, et l'autre plus superficielle, évidemment bleue ou d'un vert bleu.

" Ce point de départ assuré, je demandai à la chimie les moyens d'obtenir une connaissance plus approfondie des faits, en m'aidant de l'expérience éclairée de M. Burin du Buisson, pharmacien-chimiste à Lyon. La couleur verte du pus est un phénomène qui n'est pas rare, mais dont la cause est restée jusqu'à ce jour assez problématique. Nos expériences nous portèrent tout d'abord à l'attribuer à du sulfure de fer, et peut-être à des sulfures alcalins ; mais nous avions contre nous l'opinion de plusieurs savants qui nient la présence du fer dans le pus, attribuant l'oxide qu'on y a démontré, à une certaine quantité de sang qui aurait été contenu dans le pus. Il est vrai que d'autres chimistes, entre lesquels il nous suffira de citer l'illustre Berzelius, ont soutenu l'opinion contraire. Dans cette divergence d'avis, cependant, de nouvelles recherches devenaient nécessaires ; elles ont été répétées et variées de manière à ne laisser aucun doute sur les résultats. Or, par quelque méthode d'analyse que nous ayons essayé le pus, nous y avons toujours trouvé du fer.

" Chez notre jeune fille, le pus verdâtre appartenait à la variété du pus fétide ; avant de donner lieu à des colorations bleues et vertes, il avait déjà commencé à dégager beaucoup d'odeur, ce qui continua encore quelque temps après que ces phénomènes de couleur eurent cessé. Or le pus fétide a subi, généralement sous l'influence de l'air, une altération qui donne naissance à de l'hydrogène sulfuré par la décomposition de l'albumine qui contient beaucoup de soufre, ainsi que la fibrine.

" Un autre résultat de l'altération qui caractérise le pus fétide, c'est le développement de l'ammoniaque.

" Ces deux produits engendrent une troisième combinaison, c'est l'hydro-sulfate d'ammoniaque qui paraît se dégager avec excès, tantôt de l'acide, tantôt de l'alcali.

" Or la réaction de l'hydrogène sulfuré sur le fer du pus détermine dans ce liquide une coloration verdâtre provenant du sulfure de fer qui s'y forme ; Berzelius a signalé particulièrement cette réaction, en spécifiant que " cette teinte verte caractérise le sulfate de fer disséminé en molécules très-déliées dans les dissolutions. " (CHIMIE, t. VII, p. 61.)

" On sait qu'il existe du manganèse dans le sang. Encouragé par les résultats des recherches mentionnées ci-dessus, nous nous sommes occupés de poursuivre la recherche du manganèse dans le pus, et nous l'y avons trouvé dans les résidus dont nous avions préalablement enlevé le fer et où il se manifestait à nous, suivant les réactifs que nous employions, tantôt par les caractères propres au manganate de potasse basique (caméléon vert minéral), tantôt avec d'autres caractères également exempts d'incertitude.

" Le pus vert étant connu, il restait à étudier la coloration verte qui se remarquait sur les linges de pansement.

" Cette couleur était franchement verte, d'une teinte plus foncée que le pus lui-même ; elle n'existait que dans les points du linge en contact avec le pus. Elle paraissait tenir à la fois à un dépôt de pus qui avait comme déteint sur le linge, et peut-être aussi à une modification opérée sur le tissu.

" Nous l'avons rapportée également à un sulfure de fer ; et nous avons confirmé cette conjecture par les résultats d'une expérience dans laquelle nous sommes parvenus à reproduire artificiellement la même couleur.

" Quant à la coloration en bleu de ces mêmes pièces, M. Sédillot, qui s'est aussi occupé de la question, soupçonne que le linge joue, dans cette coloration, un rôle spécial ; mais il reconnaît en même temps qu'il n'est pas parvenu à établir nettement le fait. Je ne suis pas arrivé moi-même à une solution complète, mais je crois avoir fait un pas de plus vers le but. Voici les expériences que j'ai tentées dans le but de résoudre cette difficulté.

" Avec la charpie et les compresses de l'hôpital, la coloration bleue était manifeste chaque matin. Elle manquait, ou au moins elle était masquée, si toutefois elle se produisait encore, quand on employait des compresses trempées dans une solution métallique susceptible de donner une réaction fortement colorée ; en voici un exemple :

" Je pansai la plaie avec un premier linge préalablement plongé dans une solution de sulfate de fer, et un second plongé de même dans de l'eau de sous-acétate de plomb. Tous les deux étaient parfaitement secs, et furent séparés par une feuille de papier mou. Le lendemain, on ne trouva qu'une manifestation de l'hydrogène sulfuré, et non une suppuration bleue : le premier linge était coloré en bleu vert foncé, noirâtre (sulfure de fer), et le second en noir (sulfure de plomb). L'acide nitrique et l'ammoniaque n'altéraient pas ces couleurs. Le papier mou n'offrait rien par lui-même ; il était plutôt sali par le fait des compresses contiguës.

" Pour m'en assurer, j'exécutai un pansement avec le papier mou

seul ; il n'y eut pas de coloration bleue, mais seulement quelques taches sales et verdâtres exclusivement dans les points en contact avec les bandelettes de diachylon qui servaient à le maintenir et qui étaient devenues noires.

" Je revins à l'appareil ordinaire avec la charpie et la toile de l'hôpital, et la coloration bleue reparut aussi évidente que jamais.

" Les pièces de pansement paraissant jouer un rôle important, alors je pris ce même linge qui avait été coloré en bleu : on le lava à l'eau distillée, après l'y avoir fait bouillir, avec la précaution de le rincer à plusieurs reprises. Je m'en servis ensuite pour penser la plaie ; il ne survint point de coloration bleue ; on n'apercevait que quelques taches verdâtres dans les points qui touchaient aux bandelettes de diachylon.

" Je craignis alors que le phénomène de la suppuration bleue n'existât plus ; et pour m'en convaincre, je revins encore à l'appareil ordinaire avec la charpie et la toile de l'hôpital. La coloration bleue se reproduisit comme aux premiers jours, mais un peu plus pâle.

" Je méditais déjà de nouvelles recherches et j'avais tout lieu d'espérer une prompte solution, lorsqu'un changement favorable dans l'état de la malade produisit un changement correspondant de la nature du pus qui cessa d'être fétide et de produire sur les pièces d'appareil les effets de coloration manifestés ci-dessus. Si un nouveau cas semblable se présente à moi, et j'ai déjà fait remarquer que le phénomène n'est pas très-rare, je ne manquerai pas de poursuivre et, peut-être, de terminer mon travail. ".—*Gazette Médicale de Paris.*

MIDWIFERY.

Some practical observations on Pelvic Abscesses. By FLEETWOOD CHURCHILL, M. D., Fellow of the King and Queen's College of Physicians, Ireland, &c., &c.

THE peculiar disease, then, to which I would very briefly call your attention, is that phlegmonoid inflammation, which, by some, is termed pelvic abscess, and by others inflammation and abscess of the uterine appendages, according as the attempt is made to be more or less explicit. Of the nature of the disease, there is no difference of opinion among modern writers; the older ones, indeed, regarded it as a metastasis of the milk, and termed it " milk abscess."

I have no doubt that the attack is much more common than is even yet believed, although the attention of the profession has been latterly a good deal directed to the subject by writers in Dublin, London, Edinburgh, and France. Within two months this year, for example, I was called to three such cases.

We find this local inflammation occurring under very different circumstances, some of which we should hardly have anticipated.

1. It may occur, not only unconnected with parturition, but in unmarried persons at different ages, and independent of all the ordinary irritants of these organs. A case occurred in the person of one of the nurses at the Meath Hospital, a single woman, about 50 years of age, and without apparent cause. It exhibited the usual symptoms which I shall notice by and by, and ran the usual course, softening and opening into the rectum, after which the patient recovered.

2. I have seen several cases of the disease in married women who never had had children; in two instances it occurred within a few months of marriage; in both the tumefaction was considerable, but both terminated in resolution.

3. In some few cases, it occurs as a secondary complication of severe uterine irritation, apparently from the use of local irritants, the too frequent employment of the uterine sound, the introduction of the pronged pessary, &c.

4. I have seen the disease follow a smart attack of ephemeral fever several times; in one case it terminated in resolution after several weeks; in another in suppuration and evacuation by the rectum; and a third is at present under treatment.

5. It not unfrequently complicates or terminates an attack of simple hysteritis, of which several examples have come under my notice, terminating most generally in suppuration. One such case was the largest abscess of the kind I have ever seen, occupying about one-fourth of the abdomen; and in another, at present under my care, the tumour acquired the size of an orange, and after remaining stationary for some months, is now nearly resolved.

6. In certain epidemics of puerperal fever, inflammation of the uterine appendages appears as a special variety, with or without a corresponding affection of the uterus.

It is not unlikely that the disease may occur under other circumstances, but these have each and all come under my own observation, and I can therefore vouch for their accuracy.

With regard to the nature of the disease, as I have said, there is no difference of opinion, it is a phlegmonoid inflammation of these parts, but there is a distinction of some practical value as to the locality and the parts affected. In this respect all the cases I have seen may be divided into two classes:—

1. The first and largest exhibits a tumour just above the brim of the pelvis, and closely connected with it, fixed and immoveable, extending

downwards internally outside the vagina, through the sides of which it can be felt.

2. In the second class the tumour is distinct from the pelvis, rounded, and quite moveable in every direction.

In the latter cases, the inflammation appears limited to the uterine appendages—*i. e.*, the ovary, broad ligament, and Fallopian tubes. In the former, the soft parts which line the anterior and lateral wall of the pelvis are also involved in addition to the uterine appendages; these are more properly named pelvic abscesses.

I may add, that although either side indifferently may be affected, I think the left side is more frequently the seat of the inflammation.

As to the causes of the disease, it is not easy to be very precise.

1. In certain cases, to which I have alluded, the abscess is undoubtedly the result of mechanical injury, and the cause is quite intelligible.

2. In others, again, there would appear to be a sort of metastasis of inflammation from the uterus, which in these cases occurs towards the termination of the uterine affection.

3. In a third class of cases, especially when the patient is unmarried, it seems more fairly attributable to cold than to any other cause; but what may be the influence which determines the attack to this region, it is quite impossible to say. In one of the cases, to which I have alluded, all the uterine functions had been some time quiescent.

4. Lastly, in puerperal epidemics, when the uterus is involved, we could hardly expect, that its appendages would escape; and accordingly we find that they generally share in the disease, though much more remarkably, in some epidemics than in others. In another place I have given statistics of the comparative frequency.

Now, with regard to the symptoms, I must beg you to bear in mind what I have said as to the two varieties of the local affection; the one involving the soft parts lining a portion of the pelvis, and the other limited to the ovary and its appendages, strictly speaking.

The disease may, and generally does, I think, commence by a febrile attack; but this is not always the case. There may be a rigor, followed by heat, or this may be entirely absent. Sooner or later the patient complains of pain or uneasiness in the lower part of the abdomen; but the amount of suffering varies a good deal, and pretty much in accordance with the amount of fever.

If we examine the abdomen carefully, we shall either find a tumour just above Poupart's ligament, of varying size and thickness, and firmly fixed to the pelvis, or a moveable tumour, rounded, firm, and elastic, lying above the pelvis in the abdomen.

In the former class of cases, a vaginal examination adds nothing to

our information, as the tumour is out of reach; but in the latter, we can trace it extending more or less down into the pelvis, adding a lateral thickness, extremely tender on pressure. Generally speaking, the uterus is pushed a little to one side, is not tender on pressure, but moving it gives pain. In one or two cases I have seen the uterus fixed and nearly immoveable; in one case only have I seen both sides affected. This occurred in a married woman, unconnected with delivery.

In the former class, also, in addition to the pain, tenderness, &c., the movements of the leg of that side are affected; the patient cannot stretch it out straight without great pain, nor can she walk or stand up without bending forward.

In the latter cases the movements of the limb are quite unaffected. This distinction is, I think, of considerable practical value.

The tumour, I have said, varies in size; it is, however, always tender on pressure, and not less so as the disease advances. When it attains a considerable size or is attended with much irritation, I have seen the bladder and rectum sympathetically affected; the former more frequently so, giving rise to a frequent desire to evacuate their contents. In only one case have I had reason to believe that the tumour offered a mechanical impediment to the passage of the fæces.

These are the principal symptoms present in a simple case of pelvic abscess; but they, as well as the course of the disease, will vary much according to the extent of the local affection, the amount of constitutional disturbance, and, in some degree, according to the circumstance under which the attack has occurred.

1. In some cases I have seen, the affection had a purely local character. There was the tumour tender, firm, moveable, or immoveable; but the pulse was scarcely quickened from beginning to end; the appetite but little affected; the bowels regular, &c. The patient was confined to the sitting or recumbent posture, and suffered pain locally, but that was all.

2. In other cases, the local suffering was very considerable and unceasing; the pulse very quick, at least 120, with sweating at night; utter loss of appetite; irregularity of bowels; no sleep, and great emaciation.

3. Lastly, the cases which occur during an epidemic of puerperal fever will present its general characters in addition to the local symptoms already mentioned.

With more or less of these symptoms, but with the local ones always, the disease runs its course not quickly; often, on the contrary, very slowly, but with an uncertain duration in each case. I do not think I ever saw the tumour disappear or suppurate in less than a

month; and I have known it run on to three or four, as in two cases at present under my care.

The disease may terminate either by resolution or suppuration.

1. By resolution. I have seen repeated instances of this termination, both when the tumour is free and when it is attached to the pelvis, though more frequently in the former than in the latter, and much more frequently in those cases where there is but little constitutional irritation. In such cases, the tumour may increase to a certain degree with the symptoms I have described; it then remains pretty stationary for a time, often a considerable time, after which it gradually and slowly subsides. It is worthy of notice, that if the patient be imprudent during this process, the morbid action in the tumour may be re-excited, and the case may terminate in another manner. In one of my cases the tumour had nearly disappeared when the lady's servant became suddenly insane, and so frightened her that the tumour enlarged, and all the symptoms re-appeared. The time occupied by the process of resolution is generally considerable. I have two cases under my care at this moment illustrative of this; in one, the tumour, which was free, has all but disappeared, after nearly five months; and in the other, the fixed tumour has considerably diminished after three months.

2. In the majority of cases, however, the tumour suppurates, softens, generally perceptibly, and after a process of absorption of the intervening tissues, terminates by the evacuation of the purulent matter; this formation of matter being generally, though not always, marked by the occurrence of rigors. The channel, through which this takes place, varies a good deal.

1. In some cases it has been evacuated into the peritoneum, giving rise to peritonitis; but this must, I think, be very rare—at least, in upwards of twenty cases which have come under my notice it never occurred. I recollect a case which occurred to my friend the late Dr. Haughton, which now appears to me to have been a case of the kind. The poor woman had recovered badly from her confinement, and some time afterwards, when at the night-chair, she felt something give way, and peritonitis immediately followed.

2. Cases are on record in which the abscess opened into the bladder. If I mistake not, I saw one recently in one of the Journals; but such cases I believe to be the most uncommon of all.

3. The tumour may soften at its lower part, and the matter may find its way through the coats of the vagina, and be discharged through that canal. I have seen several cases of this termination, the results of which have been very favourable. It has been suggested that we should puncture the tumour in this situation, when the situation of the

softening is suitable; nor do I see any objection to the plan. I have, however, not found it necessary.

4. The most common situation, certainly, for a spontaneous opening, is into the rectum, and then the matter will be found discharged along with the stools. On this account, when the tumour is observed to become softer, and we have reason to suspect that matter is formed, the alvine evacuations should be carefully examined. Except when the matter escapes into the peritoneum, no degree of pain seems to accompany its evacuation. It often passes unobserved by the patient, and sometimes seems marked by a sense of relief in the tumour.

5. In a considerable proportion of cases, the tumour approaches the surface gradually, and engages the integuments, which become tense, fixed, and sometimes red and shining. The fluctuation can be felt, the intervening integument is absorbed, and the matter points, as it is called.

The extent of these abscesses superficially, is generally not much beyond the size of the tumour at an earlier period, but in some cases I have seen them very large; in one case, scarcely less than one-fourth of the abdomen seemed involved. I do not think it would be wise to wait for such an extent of disease, but we ought to open it at an earlier period, and thereby save the patient much suffering.

The symptom which most surely indicates this mode of termination, or rather this locality, is the skin becoming fixed over the tumour, not rolling freely, but being adherent to it.

Diagnosis.—There can hardly be any difficulty in the diagnosis of pelvic abscesses which occur after delivery, and as part of a more general puerperal affection; the attention being directed to the uterine system, a careful local examination will detect the tumefaction, whether it be fixed or not. If it be situated deep in the pelvis, and scarcely appearing above the brim, still the pain down the leg, and the difficulty of extending the limb, will leave but little doubt.

Perhaps an equally careful examination might be equally successful in the unimpregnated condition; but as the disease is not generally expected under such circumstances, a less minute investigation may, and often does, lead to a false conclusion. I have myself known a case of pelvic abscess pronounced to be a fibrous tumour by very competent authority.

Now, the pathognomonic symptoms are, the pain in the tumour and down the leg, the impossibility of standing quite upright, or extending the leg completely, and the tumour detected on external and internal examination.

1. From fibrous tumours it is distinguished by its comparatively

quick growth, the amount of uneasiness, and the termination. The former increase very slowly, and insensibly give rise to few or no symptoms, and, above all, are not common in the uterine appendages.

2. In women of a certain age, the filling up more or less of the pelvic cavity, might be supposed to result from cancerous disposition; but here we have no general cancerous diathesis, the uterus is always unaffected, and the occurrence of suppuration or resolution solves the difficulty.

3. That one variety of abscess which is unconfined resembles much ordinary ovarian enlargements, at first sight, but it differs in this, at least according to my experience, that it never occurs except in connexion with childbirth or miscarriage; and, as a general rule, the growth is much more rapid in the cases under consideration.

The affection, then, may be considered as well marked, and, with care, not difficult of appreciation, but requiring special care and attention when it occurs independent of parturition.

Prognosis.—For so serious an attack, involving such important organs, and liable to such various terminations, the prognosis is very favourable. I have seen more than twenty such cases, and have never seen one in which any unpleasant result occurred. Some fatal cases are on record, but they must be very rare, and probably in consequence of secondary peritonitis.

The disease is, however, very tedious, and may reduce the patient considerably, so that there may be some risk of the incursion of other diseases, if the patient be predisposed thereto.

Treatment.—Whether the attack come on after delivery or independent of it, if we see the patient during the acute stage, it will be necessary to apply leeches over the tumour, to repeat these, if required, in numbers according to the amount of irritation and the patient's strength, and to follow them by constant poulticing.

The bowels should be kept quite free, and I have found benefit from small and repeated doses of calomel or blue pill, but not continued so long as to affect the gums.

The diet of the patient during this period must be low, and I need hardly say that she must be confined to bed.

After we have somewhat subdued the acute inflammation, we must still continue the poultices until suppuration is established; but if the pulse be quiet, we may allow a little better diet, such as chicken-broth or beef-tea.

When we are satisfied that suppuration has taken place, that matter is formed, then our anxiety is as to the place where it is to be evacuated. If by the bladder or intestine, we can do nothing but continue the

poultices; but if, on a vaginal examination, we find the tumour soft and the intervening parietes thin, we are advised to make a puncture with a bistoury into the tumour, first ascertaining the presence of pus by an exploring needle. If we succeed, the after-treatment is simple; so long as purulent matter escapes, the poultice may be continued, and occasional pressure made upon the tumour, so as to empty it as much as possible.

But if the tumour enlarges above Poupart's ligament, involves the skin, and becomes soft, with a sense of fluctuation, it must be opened freely in this situation: and it will save the patient some suffering if we make an incision reasonably early. Sometimes a large amount of matter is discharged with great relief, sometimes only a small quantity, but the discharge will continue so long as suppuration goes on. When it ceases, the poultices may be omitted, and some dressing substituted if the wound remains open.

When once the abscess is opened, we may allow the patient a more generous diet, with wine, &c., and in many cases bark may be given with benefit.

But if the tumour shows a disposition to resolve itself, it will be advisable by degrees to leave off the poultices, and substitute cotton wool or flannel. In some cases, this process is hastened by a small blister applied occasionally, or by painting the part with strong tincture of iodine, and I have seen great benefit and improvement result from warm hip-baths twice or thrice a week.

Such, Mr. President, is the imperfect sketch I have ventured to lay before you. No one can be more sensible than I, that it needs an apology, and I trust it will be found in the fact, that it has been written in the midst of great anxiety and hurry, without time to refer to books, and from an earnest desire to show my willingness to cooperate with you in your noble efforts to advance the science of medicine and surgery. *Dublin Med. Press.*

MATERIA MEDICA.

At a recent meeting of the Medical Society of London, Dr. Cogswell *read a paper on the Endosmotic Action of Medicines.*

After some remarks on the construction of the apparatus, the properties of different membranes to be examined, the well-known deductions of Poisseuille, in his Memoir in the "Comptes Rendus" of the French Academy of Sciences for 1844, the author proceeded to mention his own observations. The endosmometic of Dutrochet consisted of a glass

tube, with a somewhat bell-shaped moveable expansion called the reservoir, having a deep contraction round the middle for securing the membrane. The form of reservoir preferred by Dr. Cogswell was that of a bell-jar with a projecting rim round the larger orifice, the end of the tube and the inside of the reservoir being ground to fit one another. The reservoir had a capacity of eighteen drachms, and an internal diameter at the larger orifice of an eighth of an inch. The calibre of the tube was a fourteenth of an inch. To support the reservoir, the tube was passed through a cork adapted to a hole in a leaden plate, which rested on the edge of the outer vessel. This was a glass cylinder, of such dimensions that, on receiving the reservoir, a quantity of fluid, equal to the contents of the latter, would rise to the neck, leaving sufficient below the membrane. On consideration, the author had been led to adopt, for closing the reservoir, the cœcum of the sheep, as sold in a prepared state by the French, finding, in comparison with other membrane, that it produced the most marked results. The experiments of Poiseuille were then examined in the order observed in his Memoir:

Action of Purgatives.—Seidlitz water contained in the reservoir, being opposed to serum, ascended in the tube. Albumen was found in the reservoir, and sulphate of magnesia in the serum. Now, seidlitz water causes an unusual quantity of albumen to appear in the alvine discharges, and of sulphate of magnesia in the urine. Hence the inference is, that this class of purgatives possesses the property of determining a flow of serum towards the bowels. The author remarked, that it might reasonably be questioned whether serum was a fair representative of the living fluid in the blood-vessels, or its accumulation in the bowels the only physiological effect of the saline purgatives.

Tolerance of Medicines.—The author remarked, that endosmose was found by Poiseuille to stop at periods varying for different fluids. The outer fluid being then examined, presents a striated appearance from the incomplete diffusion of the foreign matter introduced into it. After shaking it, there is a renewed ascent of the colemn; and the same thing happens repeatedly. Poiseuille employed a solution of phosphate of soda and serum. The author repeated the experiment with a solution of the salt, of density 1060, and obtained similar alternations, except as regards the elevation following the second employment of the serum. He left it to be judged, whether the facts as stated would bear out the inference, that the tolerance of medicines arises simply from the circumstance, that "the membranes of the intestinal canal, after being long in contact with the same substance, become impregnated with it, and prevent it from entering so freely into the circulation."

Influence of Opium.—Opium and its salts check diarrhœa, and

obviate the purgative tendency of other medicines. A solution of one part of nitre to eight of water was opposed by Poiseuille to serum, and produced an elevation in the tube for three quarters of an hour. While the endosmose was proceeding vigorously, the solution was withdrawn, and replaced by a similar one, containing muriate of morphia. After this the ascent continued, but with less intensity; it proceeded for an hour, ceased an hour, and then the column began to descend. Hence, it is said, the presence of the morphia diminished the endosmose, then put a stop to it, and ended by producing exosmose, such being precisely its effects in promoting constipation of the bowels. The author, however, believes, that if the experiment had been continued without the morphia, the result would have been nearly the same, as he had found that nitre by itself has but a feeble power of endosmose. To ascertain further, whether opium exerts a peculiar influence on membranes unfavourable to endosmose, he had repeatedly opposed an aqueous solution to water, and found it produce much greater effects than some of the inorganic salts. The serum of the sheep inclosed in a reservoir, and opposed to distilled water, containing a grain to the ounce of murite of morphia, produced a vigorous endosmose for about twenty-four hours. Added to syrup in the same proportion, its effect was not appreciable. He was thence led to believe, there was not sufficient ground for characterising morphia as a substance, the presence of which puts a stop to endosmose, and renders the membrane impermeable to either fluid.

Influence of Tobacco.—The decoction of tobacco is stated, by M. Poisseuille, to penetrate the membrane, and render it unfit for endosmose. A decoction of four parts of tobacco-leaves to forty of distilled water was opposed to serum. There was a descent of the column in the tube. However, the density of the two fluids was not stated. The author having made a similar decoction, found that, after boiling above an hour, the density did not exceed 1023, when it was not likely to produce endosmose with serum having a density of probably not less than 1026. But a decoction of this strength being opposed to distilled water, produced an elevation lasting for several hours; and, further, a decoction of density 1052, opposed to serum of density 1031, produced a well-marked elevation of the column, which was found not to have stopped in twenty-one hours. The author proceeded to state, that having observed a great variety in the endosmose afforded by different solutions of the same density, he tried the following experiment:—Four endosmometics, closed with the prepared cœcum, were filled respectively with solutions of sugar, sulphate of magnesia, common salt, and nitrate of potash, and placed in distilled water. In half an hour the first fluid ascended 1-9th inch, the second 1 inch, the third 2 inches, and the fourth 1-8th of an

inch. Other membranes afforded corresponding, though less marked, results. Thus the common salt was the most energetic at first, and the nitre the least so. But again, the syrup and sulphate of magnesia continued to ascend for several hours, while the common salt stopped in four hours, and the nitre in less than two. Syrup, though it has a remarkable power of endosmose, is not a purgative, which Poiseuille accounts for by its being decomposed by the gastric juice. The author then extended the examination to classes of substances. The results obtained were arranged in a tabular form, and laid before the Society. It was remarkable that the sulphates from which experience had selected the most generally useful purgatives, had invariably a strong and continued action; while the class to which nitre belonged was comparatively feeble. Chlorate of potash, and the indide and bromide of potassium, were among the substances which had the lowest place in the tables. Gum and liquorice showed a moderate degree of energy, but it continued uninterruptedly for weeks. The author, after entering into some further details, said he mentioned these as coincidents, which might prove useful aids to investigation, but without any view to the premature construction of a theory. From what preceded, he was led to the following conclusions:

1. That the division of substances into those which are favourable to endosmose, and those which on the one hand retard and annihilate it by their influence on the membrane, and on the other render the membrane permeable, or reduce it to the condition of a filter, requires confirmation.

2. That the power of endosmose of different solutions is not regulated entirely by their density, as already observed by Dutrochet.

3. That the purgative salts generally have an energetic power of endosmose, and that this is exerted with more steadiness and uniformity by those which medical experience has selected as the most useful in ordinary circumstances.

4. That some of the other substances have marked peculiarities with regard to endosmose, which will probably assist towards explaining the mode of action on the subject.

Dr. Lankester spoke in terms of commendation of Dr. Cogswell's original and interesting paper. It might, possibly, not be considered practical; but many of the theories referred to by the author resulted in practical uses. Investigations, proving the errors of old theories, were as important as those by which new ones were established. The investigation of the physical properties of matter contributed much to our knowledge of the functions of life; and, although our knowledge of those properties of membranes, called exosmosis and endosmosis, was very imperfect, it had nevertheless opened out a field for useful inquiry. Dr.

Cogswell's experiments proved the theory explaining the action of saline purgatives, by their increasing endosmosis, to be only partly true. The action of other medicines might, perhaps, be explained by them. The great endosmotic power possessed by acetate of ammonia was very remarkable; it showed that this power was not the sole cause of purgation, and might also explain the action of that medicine. He was rather astonished at the conclusions with respect to morphia, as the experiments of Poisseuille and Bachetti showed that it lessened and even reversed the endosmotic action of fluids in which it was dissolved. This explanation of its action in diarrhœa was, consequently, rendered of no use. It must be recollected, however, when reasoning from phenomena occurring out of the body with reference to those which take place within it, that the conditions were different. In the human stomach and intestines there is a living surface covered with cells in a constant state of development, and also with mucus, by which an endosmotic action must necessarily be modified. If Dr. Cogswell's paper only led to negative results, it would still be serviceable, as indicating the necessity for caution on a subject on which there had been a great deal of positive speculation.

Dr. Hanfield Jones remarked, that certain simple homogeneous membranes possessed the power of altering the nature of fluids that passed through them, and adduced the instance of the Malpighian tufts of the kidney. This was a circumstance of some interest to consider in reference to endosmotic action. He then alluded to the case of the renal secretion, in which the blood containing the elements of the secretion on one side of the homogeneous basement membrane, and a layer of albuminous semisolid matter, in the form of epithelium, on the other; and he suggested that the climation of the secretion might be n act ofa endosmosis.

Dr. Snow said, that although endosmosis was a very important subject for consideration, it did not assist much the explanation of the action of medicines, even of those of the purgative class. It might sometimes aid the action of some of the saline purgatives, subh as Epsom salts; but the drug would purge when repeatedly given in small doses, so diluted as to be of much less density than the serum of the blood. One important point necessary to be borne in mind with respect to endosmosis, has been mentioned by Dr. Golding Bird, viz., that acetate of potash and other salts, when prescribed as diuretics, must be diluted to such an extent as to enable them to be absorbed, otherwise they would induce endosmosis in the alimentary canal, and act as cathartics. Opium, probably, arrested purgation by lessening the peristaltic action of the intestines. The theory that it diminishes the permeability of animal membranes, would not

explain its power of arresting diarrhœa, even if it were correct; for the absorption of fluids taken into the alimentary canal would be retarded, which would exert a contrary effect. In order to fully understand the action of medicines, other laws must be considered as well as those governing endosmosis.

Mr. Chippendale said that much praise was due to Dr. Cogswell for the manner in which he had conducted his observations, and brought them before the Society. Still he thought if their object was to show that the operation of inorganic salts, as purgatives, is effected by a process of endosmosis the author had failed. For, in the first place, the fluid found in the dejections is not serum. Secondly, if this were a transudation of fluid by endosmosis, we should expect this to take place principally through the coats of the stomach, and to be gradually diminished along the alimentary canal. Yet experience taught us that the operation of purgative salts is principally in the colon. Again, if serum were to pass through the coats of the alimentary canal by endosmosis, this would be continually going on, forasmuch as the mucus which lubricates the inner surface of the tube is more dense than the serum. If a glaring instance were required to demonstrate that the action of purgatives was not one of mere endosmosis of serum, he would adduce what takes place upon the exhibition of a dose of castor oil. He thought, then, that we should look to some other kind of action of these salts, and that this must be one of the epithelial cells.—*Lancet.*

Comparative Value of Cod-liver Oil and Fish Oil mixed with Iodine.—Dr. Champouillon, professor at the Army Medical School of Val de Grâce, has just laid before the Academy of Medicine the result of the comparative experiments he has made upon phthisical patients with cod-liver oil, and simple fish oil mixed with iodine. Dr. Champouillon gave the cod-liver oil to 120 patients laboring under phthisis. Fifty-one were in the first stage; and of these, twenty-four were benefited, and none died. Thirty-seven were in the second stage; of these, nine recovered, and three died. Fourteen were in the third stage; and here six recoveries and four deaths took place. The author gave the iodated oil to seventy-five patients in different stages of phthisis: no improvement took place in any case, and in several, it was noticed that the remedy did harm.—*Lancet.*

Iodine rendered soluble by Syrup of Orange-peel and Tannin.—M. Debauque mentions, in the *Journal de Pharmacie* of Antwerp, that he has found means of keeping iodine in a state of solution, when

added to mixtures in the form of tincture. The author uses for that purpose syrup of orange-peel, which answers the purpose perfectly. It was suspected that *tannin* was mainly instrumental in this result; and this was rendered evident by putting a few grains of tannin into a quantity of water to which tincture of iodine has been added, and in which the iodine had of course been precipitated. The addition of the tannin caused the iodine to be immediately re-dissolved. Thus will the syrup of orange-peel be advantageously added to mixtures containing tincture of iodine, and tannin to injections composed of water and the same tincture.—*Lancet.* [We have tried the experiment, and find the statements of M. Debauque to be perfectly correct.—*Eds.*]

Use of Tannate of Alumina in Gonorrhœa.—Mr. Harrison had found the local exhibition of the remedy in question followed by the most satisfactory results. The method of using, was to throw into the passage an injection containing from 2 to 10 grains of the salt dissolved in distilled water, the strength of the solution being in a great measure determined by the amount of smarting pain produced. The most advisable method was just to keep the strength of the injection up to the smarting point. He thought it injurious to produce more than a gentle scalding.

Mr. Harrison did not anticipate, of course, equal success in every case, but he generally found the disordered condition of the urethral mucous membrane removed in the course of one or two weeks, in the ordinary run of cases.

On his recommendation, some of his professional friends had employed it in their practice, and from their reports he was supported in his high opinion of the remedial properties of the tannate of alumina. The combination of alumina and tannic acid, produced by Mr. Rogers Harrison, was of a dirty yellowish colour, and in crystals about the size of those of coarse sugar, and readily soluble in hot water.—*Lon. Med. Gaz.*

Canada Medical Journal.

MONTREAL: APRIL, 1852.

OUR PROSPECTS.

We are happy to be able to announce to our readers, that, from the patronage already extended to this Journal, there is now no doubt of its success; and we beg again to remind them that they will materially further its career, by promptly remitting their subscriptions for the ensuing year. We have been promised support in the literary department, from almost every contributor to our predecessor; and we expect much assistance, also, from our brethren in the neighbouring cities and throughout the Province generally. Practitioners, in the country districts, would much oblige us by transmitting the particulars of any remarkable cases, the details of coroners' inquests, or observations upon the endemic diseases of the localities in which they reside, for, on this latter subject, accurate information is much wanted, and would be deemed of great value and interest. We have also received from our Canadian confrères, encouragement equal to our anticipations; and the pages of this number amply prove, that when we invited their co-operation, we were not wrong in expecting a ready response to our request. We have been promised, likewise, able and efficient assistance from many of the highly educated and accomplished physicians in the junior ranks of the profession. To these we would say, *advance the science of your profession and you advance yourselves;* look to no one for assistance, but depend upon the abilities which have been bestowed upon you, and regard them as *lent talents*, for the right and proper employment of which, you are accountable. Many of those whom you regard as capable of advancing *you*, are not too successful in retaining *their own* position; and if they discountenance your efforts to attain an elevated standing in your profession, rest assured, they tremble for the maintenance of their own. Imitate the bright example of the young physicians of Europe, from whom most of the great improvements in Pathology, Physiology, Diagnosis, and in the collateral branches of medicine, have

emanated. Fields for observation, equally prolific, are open to you in this country, and reputation is more likely to meet quickly with its reward *here*, than in Europe. It is to you, the profession in this country looks for aid, in placing it on a footing of equal respectability with that of Europe, and this object can only be attained by the cultivation of sound medical science, and the dissemination of enlightened principles of practice amongst us. Be not diverted, then, from this career of usefulness, by the sneers of the jealous, the dissuasions of the interested and slothful, or the taunts or threats of the envious; rest confident that those who cannot advance themselves, can do little to retard you; but persevere in accurate observation and careful reflection, and let our pages bear testimony to the fact, that in Canada, there are young and enthusiastic members in the profession, capable of comparison with those of their own standing in any part of the world.

We invite those engaged in medical instruction to follow the example of Dr. Arnoldi, and send us extracts from their lectures, embodying their own peculiar views of the nature and management of the diseases upon which they treat. Much valuable matter might thus be collected, and be of use to suffering humanity, and for the advancement of medical science. To this latter class, we can promise an extended circulation of their doctrines. Many of the articles printed in our predecessor were extensively copied, not only into the British and American Journals, but also into those of the Continent of Europe. May not we expect similar notice to be taken of the pages of our Journal, in which will be recorded facts and observations from the pens of those who supported the British American Journal of Medicine? This is the answer we would give to those, if any there be, who might urge as an objection to publishing in this Journal, the limited extent of its circulation, as compared with those of the mother country. Let them also recollect, that it is now taken by nearly every medical man in Upper and Lower Canada, and, consequently, obtains for its writers a more extended reputation *here*, than can be furnished by any other periodical.

We should be guilty of ingratitude did we not acknowledge the promptness with which our contributors have laid their pens at our service, and we tender them our sincere thanks for the efforts they have made on our behalf. But there is one amongst them to whom we are indebted in an especial degree, and without whose assistance we could not have published our first number—we allude to our friend, Dr. Hall. No sooner was the project of a new Journal definitely decided upon, than he cheerfully furnished us with the papers he had in hand, and also the various Medical Journals of England and America; and with that spirit of liberality and true professional zeal, which have so much characterized

his management of the late Journal, he at once offered us his able assistance as a contributor to our pages. To Dr. Hall, then, not we alone, but the profession generally, are in a great degree indebted for the commencement of what, we trust, (with their kind patronage) will not soon have a termination—THE CANADA MEDICAL JOURNAL.

Statistical Chart of Canada.—We have received a copy of this really useful Publication, from the Compiler, Mr. Robert W. S. MacKay, and find it embraces a mass of most valuable information relative to the Province. It contains, along with the other matter, the most complete list of the regular medical practitioners of Canada, with their Post-Office addresses, that we have yet seen, and to the members of the profession, who require such information, we can most safely recommend it as being reliable, having had occasion to make frequent reference to it. It is published at 3s. per copy for the sheet, and where two copies are ordered to one address per mail, they will be forwarded for 5s.

Parties ordering copies will address Mr. John Lovell, Printer and Publisher, Montreal.

His Excellency the Governor General has been pleased to appoint George Buckland, Esquire, to be Professor of Agriculture, in the University of Toronto.—*Canada Gazette*, Jan. 31, 1852.

His Excellency the Governor General has been pleased to grant a License to William Porter, of Leeds, Gentleman, to practise Physic, Surgery and Midwifery in that part of the Province called Upper Canada.—*Ib.*, Jan. 31, 1852.

His Excellency the Governor General has been pleased to appoint Dr. William Bell, to be an Associate Coroner in and for the United Counties of Wellington, Waterloo, and Grey.—*Ib.*, Feb. 14, 1852.

His Excellency the Governor General has been pleased to grant Licenses to practise Physic, Surgery, and Midwifery in that part of the Province called Upper Canada, to Robert Henry Swyny, M. D., of Adjala, Esquire, and Hickman Rose Daniell, of Garrafraxa, Esquire, Surgeon.—Feb. 28, 1852.

Obituary,—At the Hôtel Dieu in this city on the 5th ult., Dr. J. B. Lebourdais, aged 67 years.

Errata in our last.—Page 15, line 35, for Jescay, read Pescay, and line 36, for He, read Hennen.

An unintentional mistake having occurred in the notice to contributors in the last number of the Journal, the Editors wish to inform their readers they have decided upon publishing articles in the French Language, and are happy to have it in their power to announce that they have been kindly promised the able assistance of their talented friend, Dr. Peltier, one of the Professors in the Montreal School of Medicine. The Editors look forward therefore, with confidence to the support they will receive from their Canadian Confrères, and trust their pages will always contain at least as many able communications from them, as the present number does.

We observe that the Lady Directresses of the University Lying-in Hospital have presented a case containing a dozen handsome silver spoons to Mrs. Buchanan on her retiring from the situation of Matron of that very useful Institution.

Notice.—Some copies of the first number of this Journal having been returned without the names of the parties who refused to receive them, this number must of course be forwarded to them, which they are requested to return, with their names written *on the envelope.*

Several subscriptions have already been received, the names will be published in the ensuing number.

Communications have been received from Drs. Dame, River du Loup; Verity, Hemmingford; Bell, Wilson; Von Iffland, Beauport; Alcorn, Lennoxville; Codd, Renfrew; J. D. Macdonald, Perth; McGee, Beverley; and Morton, Farmersville.

We would beg to call the attention of our readers to the certificate from Dr. Nelson in favour of the Plantagenet Water, which appears on the cover.

Books Received.—Ranking's Half Yearly Digest, from B. Dawson, Montreal. Nelson's "Northern Lancet" for March, 1852. Boston Medical Journal, 2 Nos. New York Journal of Medicine for March, 1852.

All communications and letters intended for the Editors of the Journal *must be pre-paid, otherwise they will not be taken out of the Post Office.*

FRENCH MEASURES AND WEIGHTS.

As it is our intention to publish, from time to time, interesting articles selected from the French Medical Journals, we have great pleasure in acceding to the request of one of our esteemed confrères, in inserting the following Tables, extracted from the last edition of *Malgaigne's Surgery*. From it, the Practitioner in this Country will be enabled to appreciate the quantities of the different remedies mentioned in the French Prescriptions.

MEASURES OF LENGTH.*

New Measures.	Approximate Value.	Exact Value.		
		Feet.	Inches.	Lines.
1 Millimètre.	1 Half-Line.	0	0	0.443
1 Centimètre.	4½ Lines.	0	0	4.433
1 Décimètre.	3 Inches 8 Lines.	0	3	8.330
1 Mètre.	3 Feet 1 Inch.	3	0	11.296

Old Measures.	Approximate Value.	Exact value.	
1 Line.	2 Millimètres.	2 Millim.	256
1 Inch.	3 Centimètres.	27	072
1 Foot.	32 Centimètres.	324	864
1 Ell (*aune*).	1 Mètre 18 Centimètres.	1188	
The English Inch.	2½ Centimètres.	25 Millim.	399
The English Foot.	30 Centimètres.	304	794
The Yard. (3 Feet.)	91 Centimètres.	914	383

MEASURES OF WEIGHT.

New Measures.	Approximate Value.	Exact Value.			
		lbs.	oz.	gros.	grs.
1 Centigramme.	⅕ Grain.	0	0	0	0.19
1 Décigramme.	2 Grains.	0	0	0	1.88
1 Gramme.	20 Grains.	0	0	0	18.82
10 Grammes.	2½ Gros.	0	0	2	44.28
100 Grammes.	3 Ounces 2 Gros.	0	3	2	10.80
1 Kilogramme.	2 Pounds.	2	0	5	35.15

Old Measures.	Approximate Value.	Exact Value.	
1 Grain.	5 Centigrammes.	0 Grammes	033
1 Gros.	4 Grammes.	3	82
1 Ounce.	30 Grammes.	30	59
1 Pound.	500 Grammes.	489	50

* The following table shows the exact relation between the new French and the English Measures of Length and Weight.

Measures of Length.

Mètre, the 1-10,000,000th part of the arc of the Meridian from the pole to the equator.	39.370788 inches. 3 280899 feet. 1.093633 yard.
Décimètre, 1-10th of a mètre	3.937079 inches.
Centimètre, 1-100th of a mètre.	0.393708 inch.
Millimètre, 1000th of a mètre.	0.03937 inch.

Measures of Weight.

Kilogramme, weight of one cubic decimètre of water of the temperature of 39° 12′ Fahr.	2.6803 lb. troy. 2.2055 lb. avoirdupois
Gramme, 1-1000th part of a kilogramme. . .	1.5438 grains troy. 0.9719 scruples. 0.032 ounce troy.
Décigramme, 1-10,000th of a kilogramme . .	1.5438 grain troy.
Centigramme, 1-100,006th	0.1543 grain troy.

NOTICE TO ADVERTISERS.

The charge for ADVERTISEMENTS in this JOURNAL will be as follows:—

For First Insertion,.....One Shilling per Line.
For Second and subsequent Insertions up to the end of the Sixth Month,.....Fourpence per Line.

JOHN LOVELL, PRINTER, ST. NICHOLAS STREET.