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UPPER CANADA JOURNAL

OF

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JUNE, 1852.

ORIGINAL COMMUNICATIONS.

ART. VIII.—*Observations on the White Globules of the Blood in Disease.*
By JAMES BOVELL, M. D., Toronto. (Continued from page 50.)

Catherine ———, 4th. The swelling and increased heat and redness, are now well established in the joint, and manifest a tendency to spread up the limb; on the inner side, proceeding from the malleolus, a red streak, knotted and tense, runs up towards the knee; and she further complains of pain in the groin. There was no tenderness or pain in the abdomen. She was delivered in the night of a still-born fetus—about the 7th month. Engaged at this time in making observations on the blood, a few drops were taken on slips of glass, and examined under the microscope with $\frac{1}{4}$ and $\frac{1}{2}$ -inch glass, from Mr. Spencer of Canastota, when I was much surprised at finding appearances which had been described by Mr. Lane so accurately, but of the true import of which I was ignorant, as I could not accept the opinion expressed by that eminent observer, that they were the veritable “pus globules.” Aware of the assertion of Mr. Addison, that the white globule of the blood may be obtained from points locally inflamed, care was taken to draw the blood from the finger of the healthy side. As to remedial measures, she was put under large doses of lemon juice, accompanied by Dover’s powder at night, and lotio plumbi acet. to limb. For a few days there was manifest improvement, but this proved fallacious, for the disease again began to spread, implicating the thigh and glands of the groin, spreading up the side of abdomen, and lastly affecting the upper extremity. She now complained of great pain in the upper part of the belly, and could only lie comfortably on the back with the shoulders raised by pillows. On

examination, the liver was found enlarged, and in the splenic region there was a decided tumefaction, and increased pain on pressure. She was ordered a purgative dose of calomel, followed by a senna draught, which acted freely, producing a copious discharge of bile, and she was placed under calomel and opium. Without unnecessarily prolonging the history of the case, it may be stated that for some days she again seemed to be improving, but she was rapidly losing flesh, becoming anæmic and sallow, and ultimately died on the 28th August, a mere skeleton of what she was. The glandular system was seriously implicated, as shown by their enlargement, and the knotted feel of the lymphatics of the leg and axilla. In consequence of my own illness at this time no internal examination of the body was made.

The second case was that of the patient Charlotte Nash, of medium height and size, light brown hair, fair skin and marked on the forehead with a blue stain. She had enjoyed good health until two years ago, when she had ague, and was always actively employed about the Lying-in Charity, making herself useful. On the 30th of May, she applied at the Dispensary for advice, in consequence of pain in the right elbow accompanied by slight redness and swelling. Her general health being pretty good, she did not wish to take any medicine; but she was, nevertheless, ordered into a distant room from the last patient, and as she was near her confinement, we were in hopes of getting her into lodgings during the day. She was ordered a purgative dose of *pil. hydrarg.*, *pil. rhei*, with half-drachm doses of *liq. potass.* and *mist. camph.*, every third hour. She became, however, rapidly worse—the disease taking on all the characters of erysipelatous arthritis. On the 1st June she was delivered of a male child. After the labour she lost blood, which was arrested by the removal of the placenta and the employment of cold cloths. For a few days, under the continued use of *liq. potass.* and *camphor. mixt.*, she seemed to be on the mend; but on the 9th, all the acute symptoms returned, and the inflammation spread rapidly up the arm, involving the shoulder joint, and at length spreading over the breast to the mesian line, passing up the neck and spreading over the cheek, engaging, in short, the whole of the right upper-half of the trunk to one-half the forehead, nose and mouth. Notwithstanding the extent of cutis involved, her spirits seemed better, and her strength certainly was not less than on the previous day; however, dreading the fearful spread of the disease to the other side, I covered the whole of the affected parts with solution of gun-cotton, applying it as soon as the coating cracked. The effect produced was to pale the surface, and arrest the extension of the inflammation; but in every other respect, to render her state much more perilous than before, for on the same evening, delirium set in with all the accompaniments of the typhoid state marked. She continued gradually getting worse until the 20th June, when the right mamma became much enlarged, and on the outside of the nipple a gangrenous spot made its appearance; other portions soon began to manifest similar changes, and on the 26th she died, one of the most frightful and pitiable beings I had ever seen. This and the last patient were the only ones not examined, although the two first taken were the last who fell under the disease.

REMARKS.—Blood taken from the finger of this patient was repeatedly examined—first on the second day of her illness, and on different occasions

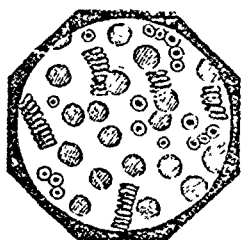
afterwards,—when we found a large preponderance of the white globules at each examination, until the 20th, when it was noticed that the red corpuscles had now undergone changes also, as there was scarcely one of them which was not shrivelled in a very extraordinary manner, leading at first to the supposition that they had burst, but the addition of a little distilled water for a time rendered them perfectly spherical. The annexed diagram will serve to illustrate the appearance of the blood taken on the second day.



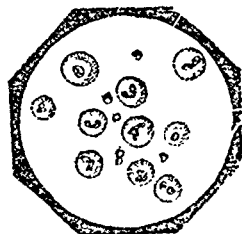
CATHERINE.

The third case is that of Mary Finessey, *ætat* 28, fair complexion, very light hair and eyebrows, strabismus in both eyes, and not able to utter a single word without stammering, nervous temperament, and of high religious feelings. She was delivered just as the patient Nash was taken ill, and had an ordinary labour, everything having gone on well, and occupying a small room by herself. On the fourth day after her delivery, she complained of pain over the pubes, which was much aggravated on pressure. She stated that it had come on during the night, and was followed by chills and fever; her pulse was very rapid and wiry, and the cheeks flushed; bowels had been moved the day before; passed no water for the night; the catheter was introduced, and a pint of dark-coloured highly-scented urine was drawn off. She was ordered grj doses of opium and calomel every hour, and to have hot turpentine fomentations to belly. Under this treatment she manifestly improved, and on the 15th June promised to have a speedy convalescence. The abdominal tenderness had ceased; the pulse had improved in strength and was reduced in frequency, and her general appearance was better, although she had lost flesh very rapidly; the urine was still high-coloured, and deposited a large amount of the triple phosphate. On the morning of the 16th, she was found to be alarmingly ill, complaining of pain under the right mamma, and of great dyspnoea; the pulse was again 120, sharp but contracted, and the alæ of the nose were pinched and white; the whole countenance being expressive of depression and suffering. On applying the stethoscope, no *frottement* could be heard, but a moist, fine crepitating rale pervaded the whole lung; and the side, on percussion, proved to be decidedly dull as compared with the opposite. With a conviction that she was labouring under the same disease as the two other patients, and from the history of the case, we resorted a second time to the use of those remedies which had been found beneficial in the early part of her case. We therefore returned to the free use of opium and calomel, applied turpentine to the chest, and supported her strength with beef tea, carb.

ammon. and senegr. She continued to grow rapidly worse, and died on the 26th June. On proceeding, six hours after death, to make an examination of the body, we found, on making an opening into the chest, that both lungs were implicated: the right lung very much congested, tough, and its lower lobes so much deprived of air as to resemble more the feel of the spleen; its colour was not that of ordinary congestion, being many shades lighter and more of dark stone colour. The left lung was not so much affected, the tubes being more engaged than the substance of the lung; both pleura contained a large quantity of puriform deposit non-adherent, leaving the membrane when washed free of deposit, but under the common magnifier showing the surface roughened. On examining the abdomen we found about two pints of yellowish fluid in the cavity, and the intestines smeared over irregularly with shells of unorganisable lymph, and which were easily removed from the surface on which they were deposited. The uterus was very much congested, and contained about 2 oz. of reddish yellow thick fluid; the liver was remarkably pale, easily broken down, and tore with a ragged fracture; it rendered the fingers sticky. The spleen was large, also pale, but did not appear in structure to be affected. The kidneys were likewise very pale, friable and easily torn; the tubular structure was healthy. Some blood, carefully removed from the left ventricle, was examined, when we found that as, in the other cases, there was a large increase of the white globules, which we have also endeavoured to illustrate by a diagram.



MARY LINESBY.



I shall not, on this occasion, give the history of two other cases which occurred in the Charity at the same time, as they would only be repetitions of those already noted, the appearances of the blood being exactly similar. Nor shall I, in this number of the "Journal," notice some other cases of this state of blood occurring in children and adults, but will only offer a few reflections on the facts immediately before us.

That the increased presence of the white globules was due to an extensive morbid condition of the system must be admitted, although what the peculiar nature of the poison was we are ignorant; whatever it was, it had the effect of interrupting the further appropriation and development of the white globules, and caused their permanent stay in the circulating fluid. Mr. Paget, in his lectures on Inflammation, has offered some valuable remarks on this point, and supports his views by an appeal to facts borrowed from the comparative anatomy as well as pathology. "In many frogs," he says, "especially in those that are young, or sickly, or ill-fed, the *white corpuscles* are abundant in the blood; they are

rudimental blood-cells, such as may have been formed in the lymph or chyle; and in these cases they are either increasing quickly in adaptation to quick growth, or increasing because, through disease or defective nutriment, although their production is not hindered, yet their development into the perfect red blood-cells cannot take place. In either case, their peculiar adhesiveness, making them apt to stick to the walls of the blood-vessels, they may accumulate in a part in which the vessels are injured or the circulation is slow, and thus they may sometimes augment the hindrances to the free movement of the blood. But I believe nothing of the kind happens in other or more healthy frogs, or in any ordinary inflammation in the warm-blooded animals. I have often examined the human blood in the vessels of inflamed parts after death, and have found no more white corpuscles in them than in those of other parts. In blood drawn from inflamed parts during life, I have found only the same proportion of white corpuscles in them as in the healthy parts of the same person. I therefore cannot but accord with the opinion often expressed by Mr. Wharton Jones and Dr. Hughes Bennett, that an especial abundance of white corpuscles, *i.e.*, of rudimental blood-cells, in the vessels of an inflamed part, is neither a constant nor even a frequent occurrence; and I believe, that when such corpuscles are numerous in an inflamed part, it is only when they are abundant in the mass of the blood. Now, as already stated, they are thus abundant in *some cases* of inflammation, especially, I think, in those occurring in people that are in weak health, and in the tuberculous."

ART. IX.—On Uterine Hæmorrhage By JOHN MACKELCAN, M. D.,
Hamilton, C. W.

The numerous articles which appear from time to time in the various British and Foreign Medical journals on the subject of post partum uterine hæmorrhage, show that the treatment hitherto adopted has not been altogether satisfactory. The frequency of its occurrence also, and its formidable character, render it of so much interest that some practical remarks on the subject may not be deemed superfluous. Before the discovery of the powers of *secale cornutum*, small doses of the tincture of opium, with the application of cold and pressure, were the principal, if not the only means depended on for the arrest of hæmorrhage after the removal of the placenta. This was indeed the established practice, and one which the records of the profession show was not always successful; cases sometimes occurring of hæmorrhage fatal at the time, or leading to fatal consequences within a few days. When the ergot was first brought into use the older members of the profession doubted its efficacy, while the younger practitioners availed themselves of its powers in producing uterine contraction, and relied on it as the internal means (almost exclusively) for the purpose of arresting post partum hæmorrhage.

As a specimen of the opinions of the older practitioners, I quote from the British Record of May 1 1848, a passage from an article by Mr. Newnham, of Farnham in Surrey, a well known intelligent and experienced surgeon. He says:—"It is not perhaps every case of uterine hæmorrhage in which we would recommend the exhibition of opium,

because there may be instances of plethoric constitution, in which the remedy might be useless and even injurious. But in every case of formidable bleeding the pulse is so rapidly sunk, and exhaustion sets in with such awful haste, and the pulse so soon becomes quick from irritability, and the nervous system gets disturbed, and unconquerable restlessness sets in, and the symptoms arising from the emptiness rather than the fulness of vessels are so prominent, that it is then we especially need the supporting influence of opium; it is then we shall find it as our main *point d'appui*, it is then we shall find it as our stronghold, eminently worthy of confidence, and that which will carry our patient through danger of the most appalling character."

And speaking of retained placenta, he says:—"But perhaps pain is altogether suspended, and the uterus does not contract upon its contents so as to effect the separation; in this case a dose of opium is the best remedy."

Again—"there may be a great deal of pain, and the uterus may contract a great deal, but does not expel the placenta, because it is implanted abnormally, or it contracts spasmodically either at its orifice or in its middle, forming hour-glass contraction, and the placenta may be absolutely detached, and lying in one or other of these compartments. Here a full opiate is to be exhibited, and when its effect may be supposed to have been produced, the hand is to be passed into the uterine cavity."

Here is opium recommended in two opposite states of the uterine parietes, namely passive relaxation and active spasmodic contraction. On the other hand, the ergot is recommended by many practitioners, as the chief remedy in post partum hæmorrhage, both with and without retention of the placenta, and its administration before delivery has even been extolled as a means of preventing after pains from which some women suffer so much. In these very opposite recommendations of medicines producing very different effects, yet applied to similar cases, there must be some fallacy. The recent recommendations by men of ability of other means, as electricity, filling the womb with cold water in a bladder, introducing a cloth wet with spirit, &c., show that our practice is not yet satisfactory; yet the above proposals seem very inapplicable, except perhaps the last of them, from the time that must be lost in their administration. Having in the earlier years of my practice followed the mode of treatment recommended by the Professor under whom I studied, which was by opium, cold and pressure, and found it in some cases most difficult to arrest hæmorrhage; or, after having arrested it, to prevent its return; and being convinced of the great power possessed by ergot in producing uterine contraction, to the absence of which the hæmorrhage is usually attributed, I took to its use to the exclusion of opium.

Still many of the cases were subdued with difficulty, and not until alarming symptoms had supervened. Dissatisfied with a mode of practice entailing so much anxiety and persevering effort to prevent fatal effects, and having observed that hæmorrhage occurred in two very opposite states of the uterine system; the one which I would term passive, where a copious and continuous flow of blood took place without any pain, the uterus appearing to possess no disposition to contract, syncope and other alarming symptoms supervening; the other which might be called active, where large gushes of blood occurred at intervals accompanied with severe

pain, arising from irregular spasmodic uterine contractions; I determined to pursue different modes of practice, adapted to the varied conditions of the uterus in these well marked classes of cases. In the latter class (*i.e.*, where there was severe pain at intervals), I had found that ergot produced no effect in arresting the hæmorrhage, but that it increased the severity of the pains, and that, notwithstanding its use, the application of cold and pressure were constantly necessary to secure the safety of the patient. I further observed that some of these cases were those in which I had administered it before the birth of the fœtus, for the purpose of increasing the force of the uterine contractions, and that although it effected that object, it prevented neither after pains nor hæmorrhage.

Being satisfied that the hæmorrhage arose from alternate relaxation and irregular spasmodic contraction of the uterus, I tried full doses (half a drachm) of tincture of opium, in all cases of post partum hæmorrhage accompanied with pain, applying cold to one hand and arm in severe cases, to moderate the discharge until the opium could take effect, and the result was most satisfactory; the hæmorrhage ceasing as soon as the pain abated under the influence of the opium, accounting for the praise bestowed on this drug by the older practitioners. It was only, however, in these cases of hæmorrhage with pain, that this satisfactory result occurred, but as they are by far the most frequent, the success attending it led no doubt to its general adoption and recommendation.

In the other class of cases, those which I have termed passive hæmorrhage,—that is where pain was absent, and where the flow of blood was continuous,—I found the ergot, pressure, and cold, exercised the most beneficial effects, subduing the hæmorrhage much more speedily and decidedly; while the opium treatment seemed to be pernicious, and to aggravate that atonic state of the uterus which is the cause of the excessive discharge. Indeed I believe that where opium is used under such circumstances, the rescue of the patient is due to the cold and pressure in spite of the opium, which prolongs the disposition to hæmorrhage. When I have been made aware that the patient has been the subject of such hæmorrhage at a former labour, I have administered the ergot immediately before or after the expulsion of the fœtus, so that its effect might be obtained in time to moderate the expected gush of blood, arising so evidently from the want of a disposition in the uterus to contract upon the placenta, and after its removal.

In one case, which I especially remember, where I was informed by the forethought of the physician who had previously attended her, that the patient had nearly perished from unsuspected accumulation of blood in the uterus, from passive dilatation, half an hour after the birth of the child; I administered a full dose of the ergot. Immediately delivery was accomplished; and although the gush of blood (and a frightful one it was,) accompanied and followed the expulsion of the placenta, yet it was subdued at once by the influence of the ergot and temporary pressure; and in a subsequent parturition of the same patient, hæmorrhage occurring before delivery, the rupture of membranes and a dose of ergot subdued it, and none followed the delivery until several days had elapsed, when the effort to sit up in bed brought on profuse discharge, which it required the ergot again to subdue; in each of these occurrences in this patient there was no pain accompanying the hæmorrhage.

The same principle holds good in retention of the placenta, where there are contractions of the uterus, sensible to the patient by being painful, and obvious to the practitioner's hand when placed on the abdomen, by the contraction of the uterus into a firm ball, while the placenta remains in its cavity instead of descending into the vagina. These cases are well described in one of the paragraphs I have quoted at the beginning of this article. The use of opium will remove these abnormal, spasmodic contractions, and expulsive pains will soon succeed them. On the other hand, where the uterus is perfectly passive, and the placenta in consequence remains attached, the administration of the *secale cornutum*, aided in some cases by friction of the abdominal parietes will produce the necessary contractions, and where partial separation has taken place and hæmorrhage occurs, the same treatment is indicated, and with the introduction of the hand into the uterus, will be the most effectual means of rescuing the patient from her perilous condition, which the use of opium would certainly aggravate. Where indeed the placenta is retained and there is no pain and no hæmorrhage, it is not advisable to interfere for even three or four hours; but where there is hæmorrhage there can be no safety for the patient until contraction is produced, and the placenta removed.

In illustration of the two classes of cases into which I would divide Uterine Hæmorrhage, I give the following cases, from my Midwifery Note Book :—

CLASS No. 1.—ACTIVE HÆMORRHAGE.

1. Mrs. P.—Hæmorrhage (not severe) with pain, subdued immediately by 40 drops of tinct. opii.

2. Mrs. S.—Severe uterine hæmorrhage, with pains, checked by use of the tinct. opii, and application of cold. A large coagulum formed *in utero*, which passed some hours after.

3. Mrs. McC.—Ergot given before delivery for sluggish pains. Severe pains after delivery, accompanied by hæmorrhage, checked by cold and pressure, but not subdued until tinct. opii \bar{z} ss was administered.

4. Mrs. C.—Hæmorrhage with pains; stopped by tinct. opii.

5. Mrs. M.—Hæmorrhage with pains; stopped by tinct. opii.

6. Mrs. C.—Ergot given to increase the pains, which were very languid. Gushes of hæmorrhage, after removal of placenta, subdued by two doses of tinct. opii, 50 and 30 drops.

7. Mrs. H.—Severe pains, with some hæmorrhage, relieved by tinct. opii \bar{z} ss.

8. Mrs. I.—Severe spasmodic pain after removal of placenta, with gushes of hæmorrhage, relieved by tinct. opii \bar{z} ss.

9. Mrs. Q.—Hæmorrhage with pain; arrested by tinct. opii, and hand immersed in cold water.

10. Mrs. T.—Gushes of hæmorrhage, accompanied with pain, three hours and a half after delivery, succeeded by syncope: subdued by tinct. opii \bar{z} ss, and re-adjusting the bandage, which had become loose.

11. Mrs. S.—Gushes of hæmorrhage, with pain and faintness; arrested by tinct. opii \bar{z} ss.

12. Mrs. F.—Ergot given to stimulate the languid uterine contractions. Placenta retained, and hæmorrhage occurring after three-quarters of an hour, introduced the hand, and finding hour-glass contraction,

administered tinct. opii ʒss, and waited, keeping the hand in the vagina, until its effects upon the uterus were perceived by the relaxation of the contraction, when the placenta was easily reached and removed, it having been separated, but retained in the fundus of the uterus by the hour-glass contraction.

13. Mrs. S.—Severe pain, with gushes of hæmorrhage, abated by two doses of tinct. opii; but the pain returned again, and a large coagulum was expelled, when the pains subsided for a time, but she suffered much from after pains, requiring full doses of opium to afford any relief.

14. Mrs. G.—Gushes of hæmorrhage, with pain; arrested by tinct. opii ʒo and ʒo drops, and hand immersed in cold water.

15. Mrs. W.—Severe and obstinate hæmorrhage, with pain after placenta was removed: gave tinct. opii, which subdued it almost entirely; but there being severe syncope, and slight trickling of blood after the pains were relieved, gave ergot.*

I will now give the notes of a few cases of Class No. 2, or Passive Hæmorrhage:—

16. Mrs. S.—Violent hæmorrhage, without pain, soon after the removal of the placenta; subdued by pressure over uterus, and hands immersed in cold water.

17. Mrs. M.—Hæmorrhage before expulsion of fœtus; uterus torpid; pains excited by ergot. No hæmorrhage after delivery.

18. Mrs. T.—Hæmorrhage, without pain; arrested by ergot. Patient in advanced stage of phthisis.

19. Mrs. B.—Hæmorrhage at commencement of labour; checked by rupture of membrane and ergot. Hæmorrhage recurred some days after, on slight exertion; subdued by ergot.†

20. Mrs. S.—Violent hæmorrhage with expulsion of placenta, and continuing afterwards in a stream; no pain. Gave ergot; introduced hand into uterus, with ice; no contraction for several minutes, during which hæmorrhage continued; external pressure and cold, (ice); alarming syncope; no pulse for some time; gave brandy; kept up external pressure for three hours with hand, under apprehension of slightest recurrence of hæmorrhage; pulse and warmth then returned. Recovery without any untoward consequences.

21. Mrs. G.—Hæmorrhage, without pain; severe syncope, arrested by ergot; cold and pressure.

22. Mrs. N.—Twin birth. Violent hæmorrhage after the birth of the first fœtus, and also following expulsion of placenta. Gave ergot, and applied cold with pressure; also introduced hand into uterus; great exhaustion—jactitation and delirium: gave brandy and water, equal parts, repeatedly, but with great difficulty, arising from the delirium and

* This patient was quite in a state of anæmia, and it was (I believe) her sixteenth pregnancy. The ergot was therefore given as a precaution, to procure permanent contraction of the uterus, as I feared the effect of the slightest additional discharge.

† This is the case referred to in a former part of this article, in whom passive dilatation of the uterus, half an hour after delivery, had nearly proved fatal; and in whom violent hæmorrhage, without pain, followed the expulsion of the fœtus in a subsequent labour, but was arrested by ergot.

resistance of the patient. Patient rallied, and recovered very slowly, fainting taking place for week after, on any endeavour to sit up in bed.*

23. Mrs. L.—Gush of hæmorrhage, without pain, following expulsion of placenta; arrested by ergot and pressure.

24. Mrs. G.—Feeble pains; uterus flaccid, after expulsion of fetus, with no disposition to expel placenta; gave ergot; placenta separated shortly after, followed by hæmorrhage, without pain; slight syncope; applied cold and pressure; hæmorrhage subdued.

25. Mrs. R.—Free and constant flow of blood following the extraction of the placenta; no pain; uterus flaccid. Gave ergot; applied cold and pressure. Hæmorrhage arrested, with only slight syncope.

These instances occurred in 180 cases, extending over a period of two years and three months, and will therefore aid in showing the comparative frequency of cases of hæmorrhage after delivery, as well as to illustrate the principle of treatment which I have advocated.

ART. X.—*Cases of General Dropsy treated by Saline Cathartics and Diuretics administered alternately.* By A. O. KELLOGG, Esq., M. D., Mariposa, C. W.

As sequelæ of the remittent and intermittent fevers incident to certain localities in this country, there are no diseases we encounter more frequently than general anasarca and ascites.

These periodic diseases, when neglected, or badly treated, are prone to leave behind them, as is well known, certain lesions, or obstructions of the liver and spleen, which impede the circulation of the vena portæ, and hence we have dropsies as a natural consequence of venous obstructions. In many cases the evidences of obstruction of the abdominal circulation have preceded the dropsical effusion for a long period. There has been pain or tenderness of the right hypochondrium, pain of the right shoulder, jaundice; the stools have been clay-coloured, the urine scanty and high coloured, depositing the lithic acid sediment, and perhaps varicose veins may be seen ramifying upon the abdomen.

Among the first indications of treatment in these cases, is the establishment of an active drain upon the portal circulation, thus unloading the congested condition of the organs to which it contributes its blood, and assisting to place them in a better condition to resume the performance of their healthy functions.

To accomplish this indication I have found nothing to answer so well as a judicious combination of vegetable and saline cathartics, alternated with diuretics and stimulants, particularly when the patient has been much debilitated by the persistence of the disease. But to accomplish anything by these means, the treatment must be thoroughly active. For a long time the debility spoken of deterred me from administering cathartic medicines as actively as they will be borne. But experience, and the result of a fortunate accident, to be related presently, have convinced me

* This case was the nearest to a fatal termination I ever attended; and the patient required iron and other tonics for some time, before complete recovery.

that these fears were imaginary, and that patients who have not been able to turn themselves in bed for weeks without assistance, will not only bear them well, but experience great relief provided they are administered, promptly and efficiently, until a decided action on the bowels is produced, and large fluid evacuations are procured, when they should be at once discontinued for a number of days, giving diuretics and stimulants, to keep the effusion at bay and sustain the powers of the patient, until you can resume their administration. I subjoin the following cases:—

CASE 1.—In the spring of 1817 I was requested to visit George McCormick, an old soldier and pensioner, residing in this Township, aged about 50, who, as I was informed, had been given over to die of general dropsy.

On my arrival I found him suffering from the most extensive and complete anasarca I had ever seen. The skin of the limbs and of the soft parts covering the thorax, neck, face, and scrotum, were enormously distended and pitted deeply; the abdomen was also much distended and fluctuating. He had not worn his clothes for several months, and was only able to move in bed by the help of his family.

The pulse was natural, urine scanty and high coloured, tongue clean, appetite tolerable, thinks he could eat more were it not for the distressing distension which follows taking food.

The situation of his residence was low, and he had had ague or some form of bilious disease the previous fall, from which he had never thoroughly recovered, dropsy supervening and proceeding gradually, until it had reached its present state. He had taken cathartic medicines at various times, with temporary relief.

R. pulv. jalapi comp. ʒiiss.

St. sum

To be followed in an hour with half a teacupful of strong senna tea, holding as much Epsom salts in solution as it would take up, (both of which medicines they had in the house,) the same to be repeated every hour until free catharsis followed and large fluid evacuations were obtained.

I had given his wife (a Highland woman who understood but little English,) directions for the making the infusion of senna, and supposed she understood me; but from not comprehending me, or from thinking that if a little would do good, a great deal would do more, she made up nearly a quart of strong senna tea, adding all the salts she had, a paper containing I should judge five or six ounces, and gave him the whole during the two or three hours following the administration of the powder.

The effect of this can easily be conceived. Shortly, a most tremendous catharsis ensued, and continued for several hours, during which time he passed immense quantities of fluid—more than a common water pail full, if I could believe the statements of all parties.

I had left a diuretic mixture with directions to take it at stated intervals during the day, commencing after the operation of the cathartic—together with gin and water to aid its diuretic operation, and also, to act as a stimulant, to relieve the debility which I supposed would follow the operation of an ordinary cathartic.

At my next visit, five or six days subsequently, the change in his appearance was both surprising and gratifying. The circumference of

his body was several inches less than before taking the medicine; his skin, from being so distended by the fluid as to appear ready to give way, was loose and flabby, hanging about him, as Falstaff would say, "like an old lady's loose gown." He could handle himself much better, turn himself in bed, raise himself up, without the fear of "bursting open," as he said. His appetite was better, and he could take more food, without the feeling of distension which troubled him so much before. He also expressed himself as feeling much stronger, and "ready to return to the charge again, whenever the word was given."*

I left him another comp. jalap powder, with directions to follow it, as before, with the senna mixture, (though not in such quantities,) and to have, after its operation,—

R. Pot. Bitart ʒiiss.
 Sp. æther nit ʒiiii.
 Tr. digitalis ʒi.
 So. apii. m xxx.
 Inf. junip. ʒxii m

Cap. coch. 1 larg 2^o da quaque hora.

I also allowed a moderate quantity of gin, which, as a medicine, was by no means disagreeable to him.

At my next visit I found him still better. He was sitting up, with his clothes on, for the first time in several months. His medicines had operated favourably. The cathartic had produced a number of fluid discharges: the diuretic had also acted favourably, and he had passed much more urine than usual. The same treatment, modified to suit his altered condition, was pursued for two or three weeks, and he recovered completely, and was able to go about his usual occupation.

CASE 2.—Dec. 20th, 1848, I was requested to visit Mrs. Leek, of Darlington, aged about 48, suffering from ascites, and anasarca of the lower extremities. She had always had good health until early in the preceding fall, when she had an attack of epidemic dysentery, which left her in a state of extreme prostration. On recovery from this, her lower limbs began to swell and fill, and continued so, until they were so large that she could scarcely move them, or turn herself in bed, without assistance. The abdomen then began to enlarge, and became much distended. The physician in attendance, fearing, I suppose, to resort to an active cathartic treatment considering the former attack of dysentery, had tried diuretics in nearly all forms, without sensibly diminishing the enlargement of the limbs or abdomen. Her pulse was natural, and of moderate firmness, tongue clean, urine scanty and high coloured, appetite capricious, though the feeling of distention which follows eating prevents her from taking as much as her appetite craves.

Remembering the result of McCormick's case, and as the dysentery

* "It is astonishing," says Dr. Watson, "how much relief to the feelings of the patient, and how great a diminution of the dropsical symptoms, are sometimes obtained by these active cathartics. Patients will earnestly beg for a repetition of them, even when their operation is attended, for the time, with considerable pain, or sickness, and much general distress."—*Practice of Medicine*, pp. 893.

had long since subsided, and there appeared nothing to contraindicate, I determined to adopt a modification of the same treatment, and ordered—

Rx.—Pulv. Jalapi Comp. ℥iiss. St. sum
 Hora post quam seq. et. rep.
 Inf sennæ comp. ʒi
 Mag. sulph. ʒii m.

The above acted favourably, bringing away large fluid evacuations, without marked irritation of the intestinal mucous membrane. I then resorted to the administration of diuretics, as in the case of McCormick, together with several glasses of good port wine during the day, thinking, by this means, to support the strength, and also to keep the effusion at bay until I could resume the cathartics.

I saw her again on the 1st of January, 1849. The swelling of the legs had subsided considerably: they were softer. She expressed herself as feeling better, and stronger; appetite better; can take more food. Circumference of the body not sensibly diminished.

To continue treatment, repeating the cathartics every third or fourth day, with diuretics and stimulants in the intervals. To take nourishing broths.—I saw her again on the 20th. She had taken the medicines, as directed, with great relief. The change in her appearance was very marked: the swelling of the limbs had nearly subsided—that of the abdomen was much less. She informed me, with much apparent glee, that she was able to walk to the stove, by the aid of a chair, and place her feet on the hearth without assistance. She also, she said, rose and took her meals regularly with the family. Appetite good. She continued to improve under the treatment, and for two years has been in the enjoyment of excellent health.

I could furnish reports of several cases similar to the above, which have since occurred in my practice, when the treatment has been similar, and the result satisfactory, were it necessary. In the treatment of passive dropsies, where the first object is to get rid of the preternatural accumulation of watery fluid, and where cathartics are indicated, I am convinced that the administration of this class of remedies, in the manner pointed out above, will be found more effectual, satisfactory, and safe, than a resort to the more powerful hydragogues, as elaterium, Croton oil, &c.

Review.

Preliminary Report on the Observations of the Aurora Borealis, made by the N. C. Officers of the Royal Artillery, at the various Guard-Rooms in Canada. By CAPTAIN LEFROY, R. A., F. R. S. March, 1850.

Second Report on Observations of the Aurora Borealis, 1850-51. By CAPTAIN LEFROY, R. A., F. R. S. Toronto, 1852.

These are two interesting documents; unpretending in appearance and extent, they contain information of the most curious and important character. The opportunities and facilities enjoyed by Captain Lefroy

for the study of Meteorological phenomena, the natural enthusiasm with which he has embraced this particular department of scientific investigation, and the admirable manner in which the practical working of the necessary experimental observations is conducted under his direction, are the subject of remark with every one who has the pleasure of visiting the Observatory. But it is not alone with the advantages which he possesses, and with the success of his management of them, that he is content. Every subject of inquiry connected with his peculiar duties, and which bears in any degree upon the evolution of magnetical laws, becomes in turn the object of careful inquiry in all its minutest details; hence the origin of the Reports before us. Four years ago he suggested that the Non-commissioned Officers of the Royal Artillery should be permitted, under the sanction of the Officers in command, to make observations on the Aurora Borealis, at the several stations throughout the Province. These observations would appear to have been also undertaken and maintained with great spirit by the Officers of the Hudson's Bay Company. The results of these observations, as far as they go, are given in tabular form, and the statistics appear to have been collated for this purpose with the greatest care and industry. The principal objects in view in keeping these registers are thus stated in the first report:—

“ 1.—To ensure the observation of every Aurora which should be visible in Canada, so as to afford a better criterion of the actual frequency of the phenomenon than can be given by observations at any one station.

“ 2.—To supply the means of judging how far variations of the magnetical elements, shown by the instruments at Toronto, during cloudy weather, might be connected with Aurora visible elsewhere.

“ 3.—To furnish data for computing the height or distance of the luminous region from the earth.

“ 4.—Lastly, to throw some light on the question, whether or no the same Aurora is not sometimes seen under considerably different forms by observers stationed not very far asunder.”

It will at once be perceived that the great end of these observations is to investigate the relation between the Auroral and magnetic phenomena. The results obtained are singular and instructive; but whether they will be sufficient to elucidate the true nature of those wonderful and beautiful manifestations of glory remains yet to be proved. Enough, however, has apparently been ascertained to show that certain laws govern these phenomena, and that we may in the course of time be able to arrive at a tolerably accurate acquaintance with them. What would seem to be established as yet is as follows:—

“ That the Aurora Borealis does not appear with equal frequency at

all the hours of darkness, but is subject, like most other phenomena in meteorology, to influences having a diurnal period as well as an annual one. The hour of maximum frequency, given by the first report, 10 or 11, p.m. The Aurora appears in Canada in every month of the year. The greatest number of observations is in April, and there is a very marked excess in February, March, and April of each year over any other period."

"It has been often stated vaguely that the Aurora appears every clear night. This is certainly not true of any one station, as far as the earlier hours are concerned, we are still short of proof that it is true in the widest meaning."

"It is remarkable that in both cases the phenomenon was first seen, in absolute time, at the most eastern stations, notwithstanding the earlier commencement of darkness at the extreme north, where the difference of latitude in some cases more than compensates for the difference of longitude; it would appear from this that the Aurora does not commonly appear at a station upon any meridian until that meridian generally is in darkness; result which, if established by the whole body of evidence, will be both new and interesting."

"The stations may be arranged in three groups. The first comprising all those which are from 500 to 1000 geographical miles distant from the Magnetic Pole; the second, those which are from 1200 to 1500 miles distant; and the third, those including the great majority of stations in the United States, which are from 1600 to 2000 miles distant, from the same point."

Captain Lefroy's examination of the several facts contained in the various sources of information in his possession, have induced him to establish the following simple and ingenious division of stations into circles for the record of observations:—

"It results from the comparison of the six winter months, October to March inclusive, 1850-1; that Aurora was seen before midnight within the first circle on 85.5 per cent. of practicable nights, in the second circle on 80 per cent., and in the third on only 48.5 per cent., indicating a rapid falling off of the causes producing it at distances exceeding 1600 miles from the Magnetic Pole."

With reference to the whole result of these analyses of records our author says:—

"It is scarcely necessary to say that these simple numerical comparisons are but the first fruits of the observations; such as they are, however, they suggest to the mind a spectacle which, if true in nature, must be of wonderful magnificence. The Polar light kindling on each meridian as that of day declines, sometimes with the splendour of prismatic colouring over half hemisphere, sometimes contracting its circles and paling its fires, for a period of days or weeks, and sometimes spreading downwards over the globe, with an intensity of which our highest conceptions are probably most inadequate, since, if the region of the display is as elevated as is usually supposed, about a third of its light must be absorbed by the atmosphere."

“With respect to the influence of these displays upon the movements of the magnetical elements registered by Photography at Toronto, I may say that I find the symbols which represent, in the abstract, ‘total absence of disturbance,’ ‘moderate disturbance,’ ‘considerable disturbance,’ and so on, against almost every variety of observation, and am not yet prepared to give any settled opinion on the subject.”

Our space prevents us from entering into the consideration of the question in its fullest extent, although rendered so captivating by the matter before us. Our purpose will have been attained if we attract attention to the subject, and induce others to enter a field so full of the most enticing topics of examination. On this point also we prefer to let the author speak for himself:—

“And if each observer will bear in mind that others, hundreds, and some of them thousands of miles off, are noting down the features of the very displays he may be looking at, as it appears to them, and that from a comparison of all these accounts, it is hoped to arrive at definite views concerning this most singular phenomenon, he cannot fail to see the value which every clear, distinct, and definite record of facts and particulars will possess, and to acquire a greater interest in the subject than the constant repetition of familiar descriptions might otherwise afford.”

The following instructions will be found highly valuable to those who desire to continue the subject and to assist in the work of observation:—

“Private observers should make a regular practice of looking for Auroras, every clear evening, from dusk to as late an hour as may be convenient, recording the result whether there has been an Aurora or not, together with the times of observation. The notes may be short, but they should be clear and precise. Wet or cloudy evenings should be noted.

“Auroral Phenomena may be divided into the following classes :

- (1.) A faint light in the north without definite form or boundary.
- (2.) “A diffused light, defined by an arch below.”
- (3.) Arches resembling the rainbow in size and form, but of a uniform white colour, sometimes retaining their apparent position for a considerable time without change.
- (4.) “A dark segment under the arch;” if any star can be distinguished within this space, the circumstance should be particularly noted.
- (5.) “Floating patches of luminous haze or cloud.”
- (6.) Beams, rays, streamers, transverse and serpentine bands, sometimes tinged with colour, and undergoing more or less rapid changes. It may be necessary to define the last two expressions—Transverse bands are frequently nothing more than arches which have advanced nearly to the zenith, or, perhaps, have passed it, and retain their regularity of form, although now projected nearly as straight lines. Serpentine bands rather resemble curtains of light, and undergo in their outline changes like those of the folds of a curtain, they are usually the most brilliant part of a display.

- (7.) "Auroral Corona, or a union of beams a few degrees to the south of the zenith."
- (8.) "A sudden appearance of dark clouds" in the region recently occupied by the Aurora.
- (9.) "Sudden appearance of haze over the whole face of the sky."
- (10.) Lastly, a disposition in light clouds at a great elevation, to arrange themselves during daylight, in parallel lines, crossing the meridian at right angles, has been frequently suspected to be connected with the Aurora, or with a common source.

"The observer should state in plain and definite language the general character of the Aurora, with reference more particularly to the foregoing characteristics. At Canadian Stations every observation of the azimuths of the extremities of an arch, when they are well defined, its span along the horizon, its height above it, or its place among the stars, will be valuable for comparison. At all stations the time at which the light passes to the south of the zenith should if possible be stated, as well as the precise times of very brilliant or active displays, which frequently last but a few minutes. Lastly, it should be noted how much beyond the zenith, to the south, the bands of light descend. The degree of brilliancy may be denoted by the terms—Faint, Moderate, Bright, Very Bright."

The progress of Comparative Anatomy. MR. OWEN'S Labours.

The deep and extensive insight which twenty years of assiduous anatomical research placed at the command of Cuvier, when he directed his view to the zoological relations and affinities of the subjects of his dexterous scalpel, placed him in a position to supersede the Linnæan, and indeed, all previous classifications of animals, by that which he finally and fully developed in the *Règne Animal* (1817). Modifications of the Cuvierian system, of greater or less extent, have been proposed by De Blanville, Oker, and some of minor note, but these innovations, being unsupported by the requisite additional facts from comparative anatomy, have failed to obtain the sanction of other naturalists, and have had no influence on the arrangement in the final edition of the "Animal Kingdom" by Cuvier (1829), in which the classification remains essentially the same as in the first; its principles are those on which almost all our elementary treatises on zoology have been based since 1830. Cuvier, however, although he knew much more than any of his contemporaries of the structure of animals, could do no more than the best men can do in the investigation of a field so diversified, and of such vast extent. And as, in his scheme, the Animal Kingdom was distributed according to his own knowledge of its organization, every accession to that knowledge might involve some corresponding modification in the distribution of animals. General propositions on the

distribution of animals, based on their anatomy, are among the last and highest acquisitions of Zoological Science; and perhaps no better test could be had of the extent to which a successor of Cuvier may have carried his researches than the degree of modification which he has found himself authorized to propose in the outline of his great predecessor.

The first of these touches the primary division of the Class *Mammalia* Cuvier adopted the ternary distribution of the mammals by our countryman Ray, and by Linnæus, according to the structure of the locomotive extremities, viz, into those with nails or claws (*Unguiculata*), those with hoofs (*Ungulata*), and those without either, and in which also the hinder limbs are wanting (*Mutica* of Linnæus, *Cetacea* of Cuvier).

With regard to the pouched quadrupeds, Cuvier, in placing them in a special order which he calls *Marsupialia*, between the *Carnivora* and *Rodentia*, speaks of them as forming, with the regular series of *Unguiculata*, a small collateral series, the different genera of which are connected together by the aggregate of their organization, although in their teeth and in the nature of their regimen, some correspond to the *Carnivora*, others to the *Rodentia*, and others again to the *Edentata*. (*Règne Anim.*, i. 80.) M. de Blainville expanded the idea, and proposed to raise the marsupials, which he calls "Didelphes," to the rank of a subclass, including therein the *Echidna* and *Ornithorhynchus*, but with the remark "On devra peut-être faire des Echidnés, etc., une sousclasse distincte."* The proposed innovation was not based on any new facts discovered in the anatomy of the marsupial or monotrematous animals. Accordingly, it not only failed to gain acceptance, but the idea of the mutual affinity of the marsupials, to the extent to which it had been originally entertained by Cuvier, began to suffer modification in the mind of the originator. Thus, in the 4th volume of the second edition of his great work on the "Ossements Fossiles,"—(1823, p. 258)—we find him proposing to extend the bounds of the Insectivorous tribe of Mammals, as previously defined by him, by the addition of the Insectivorous *Marsupialia*, "for we cannot," Cuvier says, "separate from the shrews, tenrecs, &c., the Opossums, Dasyures, and Perameles, which are allied to the *Insectivora* by characters as numerous and important as those which have induced us to unite them with the other *Marsupialia*." His brother, Frederic Cuvier—(*Dents des Mammifères*, p. xii.)—expresses himself more strongly and with more detail to the same effect. These opinions were met neither by comment nor counterstatement from De Blainville; and they served to encourage other naturalists to modify the system of

* Bulletin des Sciences, par la Société Philomatique de Paris, année 1816, p. 109.

the "Règne Animal" more directly in accordance with what seemed to be the later views of its author. For example, let us quote Mr. Bennett, the lamented Secretary of our own Zoological Society:—

"The further we advance in our knowledge of Marsupial animals, the more firmly do we become convinced of the impropriety of their separation as a distinct and isolated group. When we see that the single peculiarity that unites them is bestowed upon types of form so widely different from each other, we cannot consider this simple metastasis of function in a certain set of organs alone, however great the importance of that function in the animal economy, as furnishing sufficient ground for the overthrow of every principle of classification, and for setting at naught some of the most strongly-marked affinities that the animal kingdom affords. How striking, for instance, is the passage from the Insectivorous Carnivora, through the Opossums and Dasyuri to the Civets and other more purely carnivorous groups! What is there of importance in the structure of the Wombat, except this solitary character of the Marsupium, to separate it from the Rodent Order? And what other character can be found to justify, even in appearance, the union of any of the animals just named with the Kangaroos?"—(*Gardens and Menagerie*, &c., 1831, p. 265.)

To the solution of these questions Mr. Owen resolutely bent himself. He seized every opportunity of dissecting specimens of the marsupial animals which the vivarium in the Regent's Park or other sources afforded. Patiently did he compare their structure, organ by organ, with that of the non-marsupial quadrupeds to which they generally bore the nearest outward resemblance—and he had his reward in the discovery of a well-marked distinction in the structure of the brain of the marsupial animals, the absence, viz., of the great commissure or apparatus for uniting the two hemispheres, above the ventricles, which, with other characteristics, is detailed with the requisite illustrations in the *Philosophical Transactions* for 1837. In that Memoir the brain of a Rodent is expressly selected to contrast with that of the Wombat. Pursuing his comparisons in regard to the Osseous system, he there also detected many characters besides the marsupial bones, which were common to the *Marsupialia*, and by which they differed from their nearly non-marsupial analogues. The flattening and inflection of the angle of the lower jaw was, for example, found to be not merely a peculiarity of the Opossums, but a feature in all the marsupial animals; in the whole of which, moreover, the number of true vertebrae was shown to be the same—whatever might be the number of ribs.

Experiments were likewise instituted on the living *Marsupialia*, with regard more especially to their mode of generation, a subject left in a very uncertain and problematical state by Cuvier. Nothing was known as to the precise period of uterine gestation in any species, nothing as to

the nature of the connexion, if any, between the fœtus and womb, nor the exact part of the "uterus anfractuusus" in which the embryo was developed:—nothing as to the nature of the fœtal membranes or appendages:—nothing as to the mode or period of transfer of the new-born young to the pouch; little as to the time of its continuance there and its adhesion to the nipple. In the course of Mr. Owen's observations he discovered that in the great kangaroo (*Macropus major*) the period of uterine gestation was 38 days, and that the new-born animal was but an inch in length, naked, blind, with the hind legs shorter than the fore-legs, and the tail not longer; a creature, in a word, whose parentage could never have been suspected, if it had not been ascertained *ex visu*. He perceived further, that the mother transfers her delicate and minute progeny by means of her lips to the nipple concealed within the pouch; to this nipple the prematurely-born instinctively adheres, breathing freely, and clinging fast by its fore-limbs; and there it hangs for a period of six months; after which it uses the pouch as a place of shelter, and returns to suck occasionally for two or three months longer. Lastly, the fœtus was found to be developed, not in the "anfractuuous canals," but in the part of the uterus which Home had described as the vitelline part of the Fallopian tube: its membranes consisted of a chorion, a large umbilical sac, and a small allantois, but there was no trace of placenta.

A summary of all his labours on the marsupial and monotrematous animals was finally communicated to the Cyclopædia of Anatomy and Physiology, vol. iii. In this masterly article he shows, from anatomical and physiological researches, abundant reasons for their association together, and for the separation of the associated group, as a distinct sub-class, from the rest of the Mammalia.

Correspondence.

To the Members of the Medical Profession.

GENTLEMEN,—I have read with pleasure a letter from the Hon. C. Widmer, calling on his Medical brethren to attend a meeting in Toronto, for the purpose of promoting their attainment of the high position in which the profession stands in all other countries under British dominion.

To this end I humbly conceive it will, as a matter of course, be necessary to rid it of the charlatanism (too long tolerated) which exists in some of its branches, and I hope it will be permitted me to ask the gentlemen forming so important a body, whether it is not competent for them to take upon themselves the protection of the community against the offensive quackery that prevails in Dentistry, to which humble branch

of the profession I have had the honour of belonging for thirty years—an experience I hope sufficient to justify my taking upon myself to suggest (in the absence of any law on the subject) a form that might be adopted by the Medical Board, which would at once protect the public, and raise the practitioners to a rank that would entitle them to the appellation of professional men:—

FIRST—The conduct of a practitioner should be proved to be such as will entitle him to rank as a gentleman, not having offended the laws of his country, nor sacrificed his honour and dignity as a citizen.

SECONDLY—He should show by his indentures that he has served a proper apprenticeship with some competent practitioner, in any country under the British Crown; or if from the United States, should have a diploma from the College of Surgeon Dentists in whatever State he may have studied; in either instance, proving also by affidavit that he is the person therein named.

THIRDLY—He should be submitted to such a Medical examination as will ensure that he possesses a thorough knowledge of the anatomy and physiology of the human head, face, and parts adjacent (if any line of demarcation can be given). He should also certainly have a knowledge of Chemistry, at least sufficient to enable him to prescribe in the many complicated cases appertaining to the derangement of the dental organs.

If these rules, which are now in force on the Continent of Europe, were adopted by the Medical Board here, I feel persuaded it would be received as a great boon by all persons practising the Dental art; that is to say, by those who are competent, and they who are not, should be classed in the same category with those excrescences on the Medical profession, of which the earliest cutting away is the most healthy for the body encumbered with them; and when medical men consider that perfect mastication is the primary cause of good digestion, they will, I am sure, see the propriety of my calling their attention to the subject, and at once agree with me that some such laws are urgently requisite.

With respect to the objection sometimes raised that Dentistry, being partly mechanical, is not a legitimate subject for the supervision of the medical body, I will only say, I cannot believe it could possibly be so regarded by the profession generally. Many of the highest medical authorities have incessantly impressed on their pupils, both in the lecture-room and on all available occasions, that no one could be an efficient surgeon without a practical knowledge of mechanics; and one eminent man in particular, Sir Benjamin Brodie, under whom I studied for a short time, at St George's Hospital, used constantly to make his own splints, frequently remarking that no one could make them to please him so well as himself.

I earnestly hope that the subject will gain some attention from the proposed meeting.

I am, sir, your most obedient servant,

J. B. JONES.

Toronto, 14th June, 1852.

TORONTO, JUNE 15, 1852.

THE IMPUDENCE OF QUACKERY.

The following letter appeared in the pages of a city contemporary, and is interesting in many points of view. We should have refrained from noticing it at all, but for the notoriety which attended the case, and the unblushing effrontery which characterises the conduct of the parties concerned. As the name of the unfortunate deceased, however, has been so unceremoniously brought before the public in a newspaper, we feel justified in commenting upon the statements contained in the letter:—

To the Editor of the Patriot.

“DEAR SIR,—A paragraph in your daily paper of Saturday, announcing the death of our regretted fellow-citizen, James Browne, Esq., states that he died of ‘disease of the lungs.’ The disease that hurried Mr. Browne to an early grave, was clearly ascertained by three professional gentlemen, on examination of the body of the late Mr. Browne, to be Tubercles, or ulcer of the stomach, and that he died of ‘gangrene in the stomach.’ The universal love and respect shown to Mr. Browne by all who were acquainted with him, identifies his name with every thing that was noble and honourable; he was an affectionate husband, a kind and indulgent parent, and a true, steady, and inestimable friend; the voice of poverty or misfortune were never raised to him in vain—it may be truly said of him, that he was a ‘friend to the friendless.’

‘God takes the good, too good on earth to stay,
And leaves the bad, too bad to take away.’

“By inserting the above in to-morrow’s paper, you will oblige

“A FRIEND.

“Toronto, May 17th, 1852.”

The facts of the case are as follows:—The late Mr. Browne was attended during the earlier part of his fatal illness by Dr. O’Brien, in consultation with Drs. Badgley and Bovell. He was also seen professionally by Drs. Widmer and King. These gentlemen all concurred in pronouncing his case as one of necessarily fatal pulmonary disease. The event fully justified both their diagnosis and prognosis. There was no examination of the body after death. The friends of the deceased were requested to permit an examination to be made, but resolutely refused, in consequence of a special request made by the deceased while alive. This information we derive from parties who were intimately acquainted with

the circumstances. The *veracity* therefore of this statement is only surpassed by the ignorance and presumption which it displays. But it may be asked who were *the three professional gentlemen*, who made the examination (which never took place), and who *clearly ascertained* the disease to be one of three diseases—tubercles, ulcer, or gangrene of the stomach? We call upon these three illuminati, (if they exist,) to make a clear and scientific statement of the morbid appearances observed by them, and which led them to pronounce this positive (?) opinion on the nature of the case. But this would be impossible.

It is notorious that, during the latter part of Mr. Browne's illness, he was attended by Mr. Gamble the Homœopathist, and we believe this person was assisted by two other parties practising the same imposture. It is from one of these, we presume, that the foregoing concoction of falsehood, ignorance, and indelicacy has emanated.

The following able and stringent remarks by a British periodical, when reviewing a work emanating from one of the teachers of this false medical doctrine, are so apposite to this occasion that we quote them at length :—

“The human mind is ever prone to run to extremes. At one time we behold it admiring, and almost deifying, the creeds and systems of the past, because of the traditionary glory which invests them; at another, we see it rejecting as an idle dream the accumulated experience of successive generations, and eager in its pursuit, and fervent in its worship of whatever is *new*. These two opposite tendencies of our nature find their manifestation with more or less prominence in every sphere of thought, and in all the pursuits of active life. Every one is conversant with them as they are presented in the respective domains of politics and religion; but it has been reserved for these our own days to witness their full development in the arena of medicine. We have been long habituated to the antitheses denoted by Whig and Tory, Conservative and Radical, Old Light and New Light; now, we are called upon to mark the contrast implied by Allopathy and Homœopathy, otherwise Æsculapianism and Hahnemannism, otherwise Old Physic and Young Physic. .

“We consider that it falls not within the province or competency of non-medical journalism to venture a criticism upon Homœopathy, viewed as a system of medicine—to inquire into the truth or falsehood of its fundamental doctrine of ‘*similia similibus curantur*,’ and the alleged efficacy of its marvellous globules in their billionth and decillionth dilution. From the application of this remark, however, we ought, doubtless, to except such members of the political press as have been able, amid their multifarious pursuits and anxieties, to master the erudition of medical science, and who therefore feel themselves entitled to pronounce, *ex*

cathedra, respecting any appliance, or mode of treatment, not that it is 'improper,' but simply that 'it gives speedy relief to patients and their anxious friends.' To such intellectual prodigies we must of necessity concede the right to canvass the merits of this new system of the theory and practice of physic, assured that, if an examination of its pretensions shall awaken their 'distrust,' they will, in the exercise of a philanthropy as lofty as their attainments, in due time '*arm the public mind against it.*' Meanwhile, awaiting such enlightenment, we content ourselves to occupy lower ground, and to deal with a question more level to ordinary capacities. It is, whether the University of Edinburgh, in withholding medical degrees from students avowing their faith in the doctrines of Homœopathy, are exercising legitimate authority, or are chargeable with tyranny and despotism? Great efforts have been made to excite sympathy in behalf of such students, as if their rejection implied a determination on the part of the University to fetter the mind in its search after truth, or at least to lay peremptory arrest upon the progressive advancement of medical science. But an obvious fallacy seems to us involved in this view of the case. Dr. Russell asserts that a University medical degree 'is merely a certificate that the *alumnus* has diligently employed the opportunities of acquiring knowledge there afforded.' It is doubtless this, but it is more. It is a testimonial that, in the judgment of the examiners, the holder of such a degree, among his other qualifications, *entertains correct views as to the treatment of disease.* It is a public declaration on the part of those who grant such degree, that the health and lives of her Majesty's lieges may be safely entrusted to the guardianship of such medical graduate. But if the candidate for such medical diploma avows his faith in certain theories which his examiners regard as false, and his preference for certain modes of practice which they believe to be pernicious, wherein lies the persecution or injustice of rejecting him? For any examining board to grant degrees under such circumstances would, we conceive, be a glaring betrayal of an important trust—an open authentication of what they judged to be falsehood—a public recommendation of a system of practice which they honestly believed to be absurd and injurious. In forming our estimate of the conduct of the University, the question is not, as some would put it, whether Homœopathy is false or true; nor, as others assert, whether students may embrace its creed and administer its globules; but it is whether a Medical Examining Board, conscientiously regarding it as a system of delusion and imposture, ought to bestow licenses on those who avow their determination to put it in practice? We opine that the question appealed under this form to an unbiassed judicatory must receive a negative response. Would there be injustice or persecution on the part of a Presbytery in refusing their attestation to a candidate for the ministry

whose theological tenets they regarded as false, and whose teaching, therefore, they believed would be injurious? or on the part of a Mercantile Marine Board in withholding their certificate from an aspiring son of Neptune, whose avowed principles of seamanship would in their judgment prove perilous to the life and property entrusted to his care? Rather, would not such procedure on the part of said reverend and lay examiners be accepted as palpable demonstration of fidelity to their trust? And if the instinct of common sense, superseding argumentation, prompts such verdict in the cases supposed, will it conduct to any other decision in that under review?

“The genuine Homœopathist, be it understood, is not at variance with the ordinary practitioner on some minor questions of Therapeutics, involving the treatment, it may be, of some one or more diseases. He stands in irreconcilable opposition to the latter on the entire doctrine of curative agency. He ignores as false all the principles on which the art of healing has hitherto been based; and treats as worthless the whole record of medical experience, save what has been contributed by the votaries of his own faith. He aims not at lopping off from the tree of medical theory and practice those useless branches which mar its beauty and impair its strength; but deeming the entire tree essentially corrupt, and its fruit evil, he labours to tear it up by the roots from the soil where it has flourished for more than twenty centuries. With such antagonism of sentiment in all that pertains to the treatment of disease, between the disciples of Homœopathy and the adherents of the ancient medical faith, we see not how any University or licensing-board, ranging itself among the latter, can confer upon the members of the new sect the seal of its approbation implied in a diploma, without a sacrifice of integrity and truth. Let the followers of Hahnemann write books and build hospitals, and achieve reputed miracles of cure, and make their aristocratic dupes or converts, with all the energy and zeal to which a love of science or gain or novelty may prompt; but let them not waste their virtuous indignation, nor ask the public to expend theirs, upon those who, deeming their facts illusions, and their theory no better than ‘the baseless fabric of a vision,’ refuse to ratify their creed and to commend their practice.”

MR. JONES' LETTER.

We have no doubt but that the suggestions contained in this letter will meet with attention from the meeting to be held on the 1st July. Dentistry is not as yet sufficiently protected, as a department of surgical science in this Province. Its importance is acknowledged and respected by professional men, and the better informed portion of the public; but with the mass of people any man who can exhibit a flashy case of instruments, and pull out a tooth with apparent dexterity and dispatch, meets with a pecuniary reward more readily, and to a much larger amount, than the man who has been regularly educated, and practises conscientiously.

MONTHLY METEOROLOGICAL REGISTER, &c

Latitude, 43 deg. 39.4 min. N. Longitude, 79 deg. 21.5 min. W.

Mgt.	Day	Barom. at tem. of 32 deg				Temperature of the air.				Pressure of Vapour.			
		6 A.M.	2 P.M.	10 P.M.	MEAN.	6 A.M.	2 P.M.	10 P.M.	MEAN.	6 A.M.	2 P.M.	10 P.M.	MEAN.
d	1	-0.414	-0.332	-0.172	-0.291	0.5	-1.0	2.1	-1.3	0.242	0.296	0.252	0.269
b	2	0.047	0.046	..	..	1.1	2.4	..	..	2.2	2.95	..	..
a-b	3	0.228	0.263	0.364	0.297	-1.5	0.9	-1.8	-1.1	2.11	1.31	1.44	1.52
b	4	0.30	0.558	0.499	0.528	1.9	7.5	5.5	5.4	1.31	1.68	1.58	1.50
b	5	0.52	0.531	0.435	0.488	-4.0	7.8	2.8	3.7	1.83	2.14	2.76	2.35
d	6	0.16	0.381	0.205	0.277	1.7	13.3	2.8	5.4	1.86	2.3	2.20	2.31
b-d	7	0.227	0.12	0.075	0.131	1.7	8.8	12.7	7.6	2.10	3.33	3.72	3.13
c-d	8	0.002	0.067	0.079	0.045	9.3	6.2	14.0	9.7	2.90	3.81	3.00	3.39
c	9	0.018	0.061	..	..	-1.7	12.0	..	..	2.28	3.13	..	..
c	10	0.143	0.187	0.176	0.169	-3.3	-3.5	3.8	2.7	1.79	2.49	2.65	2.12
c	11	0.166	0.38	0.013	0.085	5.7	0.5	2.0	0.2	2.3	2.32	2.47	2.13
b	12	-0.22	0.133	0.201	0.128	9.1	3.1	3.1	3.7	3.38	4.05	3.03	3.50
b	13	0.253	0.230	0.130	0.191	3.7	3.9	4.2	2.5	2.49	3.17	2.90	3.03
c	14	0.101	0.149	0.250	0.114	4.5	-1.0	2.4	2.1	2.62	2.90	2.84	2.77
a	15	0.334	0.229	0.121	0.231	4.6	1.0	2.8	1.1	2.17	3.89	3.14	3.66
a	16	0.092	0.065	..	..	9.1	2.2	..	..	3.79	4.65	..	..
b	17	0.356	0.179	0.006	0.160	0.5	-7.0	-7.7	-5.4	3.03	2.33	1.60	2.32
c	18	0.160	0.192	0.057	0.081	8.2	-5.2	6.8	6.8	1.7	1.94	1.94	1.97
d	19	0.043	0.179	0.127	0.147	-4.3	9.0	8.3	6.5	1.91	2.43	1.89	2.13
c	20	0.024	0.149	0.232	0.130	8.6	12.0	12.4	11.6	1.69	2.01	1.54	1.78
c	21	0.22	0.118	0.123	0.159	2.2	0.1	0.8	-0.1	2.3	2.19	2.13	2.37
c	22	0.149	0.153	0.121	0.143	5.0	5.3	1.8	3.3	2.74	2.94	2.43	2.76
c	23	0.195	0.062	..	..	6.2	5.7	..	..	3.25	4.8	..	..
c	24	0.010	0.085	0.120	0.072	0.2	10.7	13.2	8.1	3.21	4.6	3.97	3.97
b	25	0.016	0.081	0.093	0.062	6.0	-1.7	-2.6	0.8	2.72	2.9	2.38	2.75
a-d	26	0.084	0.32	0.085	0.099	0.5	-6.1	-1.2	3.6	1.59	1.79	2.22	1.96
c	27	0.229	0.260	0.163	0.206	2.3	2.5	-4.5	2.9	2.47	4.11	2.21	3.00
c-b	28	0.119	0.128	0.147	0.123	2.1	4.6	-0.5	0.4	3.09	3.97	3.07	3.36
b	29	0.168	0.317	0.190	0.226	2.9	9.6	6.0	6.4	3.51	4.76	3.97	4.06
a	30	0.054	0.129	..	..	4.5	3.9	..	..	2.12	1.99	..	..
b	31	0.127	0.065	0.042	0.076	5.5	2.3	0.9	1.8	2.17	2.91	2.72	2.63
Mean:	Normal..	29.598	29.555	29.565	29.564	46.10	58.63	48.21	51.50	2.14	2.93	2.57	2.67
	Observed	29.644	29.602	29.614	29.620	45.57	58.99	48.68	51.67				

Highest Barometer 30.128, at 8 a. m. on 4th } Monthly range:

Lowest Barometer..... 29.168, at 6 a. m. on 1st } 0.960 inch.

Highest observed temperature 73.3, at 3 p. m. on 29th } Monthly range

Lowest registered " 32.0 a. m. 5th and 18th } 52.2

Mean highest observed temp. 59.59 } Mean daily range:

Mean minimum Ther. 41.18 } 17.03

Greatest daily range, 30 S, from 3 p. m. on 29th to a. m. of 30th.

Warmest day, 24th. Mean temperature, 61.82 } Difference,

Coldest day, 20th. Mean temperature, 41.18 } 20.61

The "Means" are derived from six observations daily, viz:—at 6 and 8, a. m.; 2, 4, 10, 12, p. m.

The column headed "Magnet" is an attempt to distinguish the character of each day as regards the frequency or extent of the fluctuations of the magnetic declinations indicated by the self-registering instruments at Toronto. The classification is to some extent arbitrary, and may require future modification, but has been found tolerably definite as far as applied. It is as follows.—

(a) A marked absence of disturbance.

(b) Unimportant movements,—not to be called disturbance.

(c) Marked disturbance,—whether shown by frequency or amount of deviation from the normal curve,—but of no great importance.

(d) A greater degree of disturbance,—but not of long continuance.

(e) Considerable disturbance,—lasting more or less the whole day.

(f) A magnetical disturbance of the first class.

The day is reckoned from noon to noon. If two letters are placed, the first applies to the earlier, the latter to the later part of the trace. Although the declination is particularly referred to, it rarely happens that the same terms are not applicable to the changes of the horizontal force also.

REMARK.—Latest snow on 20th,—depth inappreciable.

Toronto, 14th June, 1852

H.M. Magnetical Observatory, Toronto, C. W.—MAX, 1852.

Elevation above Lake Ontario, 108 feet.

Humidity of Air				WIND			Rain:	WEATHER.
G.A.M.	10	30	6 A.M.	4 P.M.	10 P.M.	(inches)		
.97	84	.84	.56	E	W	W	0 120	Overcast; slight rain nearly all day.
82	77	.	.	NW b N	SW	N	...	Generally clear, dense clouds round horizon.
81	30	54	5	N	N	NNW	.....	Unclothed; very fine.
52	52	67	56	N b E	S b E	SW b W	.....	Unclothed; fine, halo round moon from 10 p.m.
79	43	84	61	Calm	SSW	Calm	.....	Unclothed; faint auroral light at 10 p.m.
72	11	67	59	"	Calm	"	mapp	Unclothed; but slight haze round horizon.
71	56	78	69	"	"	SW	mapp	Overcast; drops of rain at 6 p.m.; faint aur. 10 p.m.
74	69	59	70	SW	SSW	NW b W	.....	Rain and large hailstones 2 to 3 p.m.; aur. 9 p.m.
67	50	.	.	Calm	Calm	N b W	.....	Light clouds; faint aur. streamers 9-30 p.m.
73	61	75	66	"	SSW	Calm	.....	Unclothed, auroral streamers at 9-5 p.m.
94	59	78	70	"	E	"	0 055	Overcast; slight rain from from 9-10 p.m.
87	78	84	84	NNE	Calm	"	.....	Rain 5 to 6 a.m., occasional showers; clear 10 p.m.
92	64	77	70	Calm	SE b E	ESE	.....	Unclothed, very fine day.
72	63	7	70	ESE	E b N	NE b E	0 210	A.M. nearly clear, p.m. overcast slight rain 10 p.m.
95	93	91	91	E	E	E	0 075	Dense fog; drizzling rain most of the day.
81	78	.	.	SE b S	SE	E b N	mapp	Overcast; hazy, very dull.
94	61	61	71	Calm	W b S	W b N	mapp	Dense clouds, showers 5 to 7 p.m. Aur. 9 p.m.
80	47	74	68	"	SE	Calm	.....	Hoar frost 5 a.m., day clear, faint aur. 9 p.m.
71	68	74	70	"	FSE	W b S	.....	Light haze, halo round sun 8 a.m.; aur. 10 p.m.
71	61	68	68	W b S	WNW	Calm	mapp	Snow and sleet 9-3 a.m.; bright aur. 8-20 p.m.
79	48	67	61	Calm	S b W	"	.....	Hoar frost 5 a.m.; fine, faint aur. 9-20 p.m.
70	45	64	64	"	SE b E	"	.....	Light clouds dispersed; fine day.
78	65	.	.	"	Calm	"	.....	Light clouds and haze, mostly clear p.m.; fine.
96	56	69	74	"	S	"	.....	Generally clear, fine, faint aur. light 10 p.m.
70	65	72	66	N	ESE	"	.....	Day clear; overcast from 10 p.m.
57	39	70	54	ENE	E b N	E	0 085	Light clouds and haze dispersed; fine.
77	70	90	79	Calm	NNE	Calm	mapp	Overcast till 4 p.m., aurora from 9 p.m.
91	63	81	79	"	SE b E	"	.....	Unclothed hazy, very fine.
91	63	88	78	"	S b W	W b N	0.55	Sultry, thunderstorm from 5 to 7 p.m.
74	6	.	.	NW	S	NNW	.....	Unclothed; very fine day.
75	57	69	64	NNW	SSE	Calm	.....	Light clouds dispersed a.m.; clouded, dull p.m.
.80	.59	.71	.70	Miles:	Miles:	Miles:	1.125	
				2.28	6.75	3.09		

Sum of the Atmospheric Current in Miles, resolved into the four Cardinal Directions:

North.	West.	South.	East.
791.35	1058.14	881.90	425.75

Mean velocity of the wind—4.00 miles per hour.
 Max. velocity—21.0 miles per hour, from 2 to 3 p.m. on 17th.
 Most windy day—17th: mean velocity—9.90 miles per hour.
 Least windy day—23rd: mean velocity—0.11 ditto.
 Most windy hour—2 p.m.: mean velocity—6.75 ditto.
 Least windy hour—4 a.m.: do. —1.99 ditto.
 Mean diurnal variation—4.78 miles.

COMPARATIVE STATEMENT.

Year	TEMPERATURE				RAIN		SNOW		Wind. Mean velocity.	
	Mean	Max	Min.	Range	Days	Inches	Days	Inches		
1810	53.78	74.5	30.8	43.7	9	1.156	0	No	Miles.	
1811	50.77	76.2	26.0	49.6	11	2.350	1	records		
1812	49.14	71.3	30.0	44.8	7	1.275	0	do		
1843	49.28	79.9	28.9	50.7	5	1.570	0	do		
1844	53.8	77.7	29.0	48.7	14	5.670	0	do		
1845	50.1	76.6	29.1	47.2	8	2.300	0	do		
1846	55.37	78.1	31.3	43.8	9	1.375	0	do		
1847	54.92	72.5	27.8	44.7	12	2.040	0	do		
1848	54.12	78.6	31.9	46.6	13	2.520	8	do		4.93
1849	48.63	72.5	32.7	39.8	16	5.115	8	do		5.33
1850	47.61	76.3	31.1	45.2	7	0.345	1	mapp.		6.32
1851	5.18	73.2	28.7	44.5	12	2.950	1	0.5		6.34
1852	51.67	73.3	34.5	38.8	7	1.125	1	mapp.		4.00
Mean	51.77	75.64	30.41	45.20	10.0	2.768	0-3	5.38		

THE MEETING.

We are happy to find that Dr. Widmer's appeal to the profession has formed the subject of remark by several of the most influential papers in the Province, all of them speaking strongly on the necessity of action, and the propriety of the step about to be taken. It is also with pleasure that we observe that in some places distinct action has been taken by members of the profession themselves, in order to organise a proper system of representation by delegates. In those localities where measures of this kind nature have not been adopted, we presume that we shall see many come to the meeting.

The meeting will take place in the Hall of the Mechanics' Institute, at 12 o'clock, and means will be employed to give this information to every one who arrives in the City, and who may not otherwise be aware of the time and place.

We believe that every medical man agrees with us in the opinion that something is necessary in order to place the Profession in that position in this Province to which it is justly entitled, and which it enjoys in other countries. The great difficulties in the way appear to be, first, to determine upon what can be done; and, secondly, having determined this point, to set to work properly and earnestly for its accomplishment. Such are the main objects to which the attention of the Meeting will be directed, and we hope to see that they will secure that careful deliberation which their importance demands.

ERRATA.

In Remarks on the Winter of 1851-2.

PAGE 1, 3d line from bottom, *dele* 'in or the.'

" 3, for 'subtract' read 'subtract;,' also in Note for '—10·5' read '10·5;,' for 'that it had been,' read 'and that it had been.'

TABLE II. 1832-3, March, for 33°·9—36°·0, read 23°·9—26°·0; column Mean, for 32°·05, read 31°·67; also 1845-6, January, for 16°·1 read 26°·1; column Mean, for 28°·78 read 30°·45; last line, for 23°·8 read 23°·4, for 30°·7 read 30°·3.

PAGE 4, last line, for 'January 1833' read '1839.'

TABLE III. 1845-6, for 19°·5 read 22°·6; last line, for 24°·15 read 24°·25, and transfer to foot of column of Mean Tem. The reference (*m*) is to the remark that this year the observation referred to was at 7 A.M. instead of 8 A.M.

PAGE 5, line 12 from bottom, *dele* 'and 1845-6.'

columns 6h. 7h. 8h. A.M., and 8h. 9h. 10h. P.M.

" 8, *Thermometric Reductions* insert *minus sign* in each line of METEOROLOGICAL REGISTER. The printer's neglect to insert the signs has deprived the Table of all its significance. The reader is requested to insert *minus sign* before each entry in Table of Barometer, with the following exceptions: 2d. 10h; 3d. 6h. 10h. 2h Mn.; 4d. 6h. 2h.; 10d. 6h. 2h. Mn.: Also in Table of Thermometer, before each entry, excepting: 1d. 6h.; 5d. 6h.; 12d. 6h. 2h.; 13d. 6h.; 14d. 2h. Mn.; 15d. 6h. 2h. 10h. Mn.; 16d. 2h. 10h. Mn.; 17d. 6h. 10h. Mn.; 18d. 6h.; 19d. 6h. 2h. 10. Mn.; 20d. 6h. 10h. Mn.; 21d. 6h. 2h. 10h. Mn.; 22d. 6h. and 30d. 6h.