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CANADA

MEDICAL & SURGICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

Valedictory address to the Graduates in Medicine and Surgery, McGill University, Delivered on behalf of the Medical Faculty at the Annual Convocation held in the William Molson Hall of the University on Wednesday 31st March, 1875. By WILLIAM OSLER, M.D., L.R.C.P.L., Lecturer on Institutes of Medicine.

GENTLEMEN OF THE GRADUATING CLASS.—The pleasant duty devolves upon me of offering you, on behalf of the Faculty of Medicine, congratulations on your present success, and good wishes for the future. For four years you have been occupied in mastering the elements of your Profession in the Lecture room, Hospital ward, and Dispensary; and now, having satisfied the requirements of the University, the long looked for degree has been conferred, the coveted title obtained. The time has arrived for you to put in practice what has been taught you here, and your success will depend, in great measure, upon how you have taken advantage of the opportunities afforded at this school.

At the outset it is necessary for you to bear in mind that your professional education is by no means complete; you have, as it were, only laid the foundation, and, let me say, Gentlemen, while it is to be hoped that a good and promising foundation has been laid under the guidance and instruction of others, it rests with yourselves what the superstructure shall be. The credit of your College, the honour of that Profession to which it is our privilege and pleasure to belong, your advancement in life depend on the course you now

mark out and follow for yourselves. You must not be content to rest on your oars. The canons of the church, the formulas of the law, are to a certain extent unalterable, are stereotyped. Not so medicine. It is preëminently a progressive science, day by day receiving fresh acquisitions, opening up new fields for investigation, and it will be your duty, as far as in you lies, to keep pace with this progress. During the first few years, while waiting for practice, you will have ample leisure to work up more thoroughly the various branches of your Profession, and keep posted in the latest medical literature. Cultivate in these early years studious habits. It happens too frequently that after the severe work of the final session, books are thrown aside, and rarely reopened. A glance at the bookshelves of any professional man—Cleric, Lawyer or Physician, will enable you to judge better than anything else, the estimate he has formed of his calling. Let it be also an ambition to add your mite to the store of medical knowledge. Every one can do something; and the routine of general practice affords many cases worth reporting or commenting upon. Our Medical Journals greatly need the coöperation of the profession throughout the country, and in thus recording your experiences you will benefit yourselves, and help to raise the standard of Canadian Medicine. Hitherto, Gentlemen, your relations have been chiefly with your teachers and with each other; now these relations are changed, and you will have to deal in the future with patients and fellow practitioners. On the first point it would not become me to say much. Remember, however, that every patient upon whom you wait will examine you critically and form an estimate of you by the way in which you conduct yourself at the bedside. Skill and nicety in manipulation, whether in the simple act of feeling the pulse, or in the performance of any minor operation will do more towards establishing confidence in you, than a string of Diplomas, or the reputation of extensive Hospital experience. Formerly, in the days of apprenticeship, the medical student was brought

daily in contact with patients of all classes, now it is too often the case that Hospital practice is the only variety seen, and the sudden change to private practice is found rather trying. Time soon remedies this, and every case successfully treated adds to the confidence you feel in your own powers. Fortunately, the first patients are among the poor, who are less exacting, more easily pleased, and more disposed to make allowances for a young practitioner than the upper classes. You have of course entered the Profession of Medicine with a view of obtaining a livelihood; but in dealing with your patients let this always be a secondary consideration. It has been well said, "No one should approach the temple of science with the soul of a money-changer." Let the spirit of our Medical moralist, Sir Thomas Browne, whose Religio Medici I would commend to your perusal, actuate you. He says "Let me be sick myself, if sometimes the malady of my patient be not a disease unto me; I desire rather to cure his infirmities than my own necessities; where I do him no good methinks it is scarce honest gain, though, I confess, 'tis but the worthy salary of our well intended endeavours." Upon your relations to fellow-practitioners, allow me to offer you a few words of counsel. It is a fact well known to you all that the great opprobrium of our Profession, especially in the small towns, is the constant rivalry and distrust of one another displayed by its members. That men whose high calling ought to bind them closely together, and whose interests are so much in common, should thus disagree, is a matter deeply to be regretted; and, I would urge upon you, during your, let me hope, prosperous career, to do all that may lie in your power to remove this scandal from our midst. A little watchfulness when commencing practice may prevent it entirely in your own circle, and you may thus have your brother practitioners as friends not enemies. The evil, I regret to say, is generally traceable to the patients. You will not be engaged in practice many weeks before one seeks you who has been under the care of some other medical man. He or she

gives you a statement of the case, blames the former attendant, and expects you to sympathize and add your measure of censure. If you do, it gets talked of, and sooner or later reaching the ears of your rival practitioner forms the nucleus of a serious quarrel. Make it a rule always to discourage the tales of a patient about another medical man; and even when you think he has made a mistake, be slow to judge. Often too you may feel aggrieved, and think yourself wronged or slighted; instead of giving vent to your feelings, on such occasions, restrain them, and remember the injunction "If thy brother trespass against thee; go and tell him his fault between thee and him alone; if he shall hear thee, thou hast gained thy brother."

A word now on the Temperance question, which is becoming an all important one in Canada for us as medical men. That alcohol is a medicine, and a valuable one, nobody not blinded by prejudice denies; but bear in mind that it is a dangerous remedy, and one that should not be, as it is, so generally recommended by practitioners.

There are many conditions, for which alcohol is now freely prescribed, quite amenable to treatment by other medicinal agents combined with a careful regulation of diet. When you do order it, give positive directions about the quantity, and the length of time it is to be continued. Inattention to these matters, especially in patients suffering from any of the neuroses, is occasionally the starting point of dangerous drinking habits. Medical men, more than any other, have opportunities of observing the commencement of such habits, and care should be exercised, lest this tendency be fostered by the form of treatment employed. No class of individuals can better wage war against the indiscriminate drinking habits of the public than the Doctors, and the laity will hearken to their admonitions on this point; even when the exhortations of the Divines are treated with contempt. Example, Gentlemen, is better than precept, and by becoming teetotallers yourselves, you will neither injure your health nor damage your professional prospects.

Too many valuable lives in our Profession are sacrificed yearly to intemperance ; and, now is the time for you, with minds still "wax to receive and marble to retain," to lay the foundation of good sober habits.

Those of you from Ontario, and intending to practice there, will, I suppose, present yourselves to the Medical Council for examination. This much abused institution is, I believe, doing good service to the Profession of that province, and it is to be regretted that such an examining body does not exist for the Dominion. In a country like this where the power of granting degrees in Medicine is possessed by all the sectarian Universities, it is but just that the profession at large, should have some guarantee of the proficiency of the graduates ; and this they can only obtain by combining together, as in Ontario, and examining every man for his license. The examinations are thorough, conducted with fairness, and such as no McGill man who has attended to his studies need fear. Just as Edinburgh men sometimes fail at the Primary and Final Examinations before the Royal College of Surgeons, so occasionally will men from the Universities of Canada be rejected at the Ontario board. As an independent examining body it may yet do much towards elevating the standard of Canadian medicine by making the necessary qualifications of a higher order than they are at present. Hitherto it has not afforded much protection against illegal practitioners, but now, as the finances are in a better condition, the Council is prepared to take action, and intends to prosecute unlicensed men. One hears the assertion not unfrequently made that the existence of the Board is prejudicial to the interests of our Medical school, as it hinders Ontario students from coming here. I do not see how this can be the case. The Ontario student, whether he attends the Toronto schools or McGill, has the same examinations to pass, one before his University, the other before the Board. It entails an additional expense, and it is this, not the examinations with which all the students find fault.

In conclusion, gentlemen, let us hope, that wherever you go, you will maintain the good name of your Alma Mater, and add to the lustre which already surrounds her. Bend all your energies to the attainment of proficiency in your calling; work while it is yet day, that when your night comes it may be said of you as of Gerard de Narbon, one of Shakespeare's Physicians."

"He was in what he did profess, well found."

Nelaton's Method of Resuscitation in Cases of Syncope in Anæsthesia produced by Chloroform. By G. P. GIRDWOOD, M.D., M.R.C.S., England; Professor Practical Chemistry, McGill University.

In No. XXVI vol. 2 of the London Lancet for Dec. 26, 1874 is a letter from Mr. George Pollock on "The danger of Anæsthetics" called forth by the report of a death from the administration of Bichloride of Methylene. This letter provoked a correspondence upon the relative safety or danger in the use of different anæsthetic agents, wherein some of the writers extol the advantages of sulphuric ether, and nitrous oxide gas, or of mixtures of these agents with chloroform and draw contrasts to the disadvantage of chloroform as an anæsthetic, whilst others maintain that chloroform if properly used is as safe as ether, and lay the blame of death in fatal cases either to carelessness in administration or to impurity of the preparation used. There is doubtless much to be said in favour of and against all anæsthetics and every one speaks with more confidence of the particular anæsthetic he is in the habit of using and with which he is most familiar. If it were possible to arrive at exact statistics of the number of cases in which anæsthesia is produced by, and the number of deaths resulting from the use of each anæsthetic it would be possible to draw some sound conclusions, more especially if the quality of the agent were also correctly ascertained. As it is, the statistics are obtained only from the limited number of severe operations

in which these agents are employed and it must remain always a difficult point of determination, how far the death is due to the action of the anæsthetic, and how far to the operation, or as death has occurred not unfrequently almost before the inhalation has commenced how far to mental causes which would exist independently of the anæsthetic. I am informed that during a period of 25 years experience in the Montreal General Hospital only two cases of death have been attributed to the use of chloroform. The method of adminstration being on a towel folded into a cone ; and allowing of free access of atmospheric air. I am strongly in favour of this mode of administration as against all other forms of complicated apparatus which often frighten nervous patients. That chloroform has a decided tendency to depress the heart's action is clearly admitted, especially when taken for a long operation, and hence its danger ; for comfort and convenience of administration it is superior to all anæsthetics yet introduced. It does, however, occasionally cause syncope and sometimes even death by reason of the depression of the heart's action, and consequent failure of supply of blood to the brain.

Hence it appears to be admitted generally that chloroform is more dangerous than ether, the next most useful anæsthetic, but the objections to the use of ether to a great extent counterbalance its greater immunity from fatal results. The amount of muscular activity is so great as often to materially interfere with the operator, and render the operation more dangerous, especially in cases where careful dissection is required, an example of which is given by Mr. Furneaux Jordan in the *British Medical Journal* for January 30, 1875, where he experienced great difficulty in ligating the femoral artery from muscular tremor, the result of the use of ether.

In the same Journal Dr. Thomas Keith of Edinburgh laudates ether at the expense of chloroform, on the ground that in ovariotomy cases the use of chloroform is followed by prolonged vomiting which is not the case with ether. It

must be a difficult question to decide how much of the vomiting is due to operation, how much to chloroform. The essential conditions for the safe administration of chloroform are, to allay nervousness at starting, to avoid by ample dilution irritation of air passages, to produce the effect required with a minimum quantity of chloroform and in as short a time as safety will allow, to watch the pulse and respiration and stop at once if any untoward symptom occur, and if such should happen to have recourse at once to remedial measures.

In spite of all care cases of syncope even fatal will occasionally happen.

In the British Medical Journal for August 22, 1874, is a description of the application of Nelaton's method of resuscitation from syncope during chloroform narcosis, by J. Marion Sims, M.D. where the patient was restored after prolonged and repeated efforts only, but the process was eminently successful. In the Canada Lancet, page 165, vol. 7 a case is recorded of the successful treatment of a case of chloroform narcosis by this process by Dr. Wade of Cobourg. J. D. Brown, Esq., F.R.C.S., England, in a paper read before the South Wales and Monmouthshire branch of the British Medical Association, July 5, 1871, gives a record of five recoveries from dangerous syncope, under the influence of chloroform, by similar treatment. I can add one more case in proof of the utility of this plan for recovering patients from syncope caused by chloroform.

During my tour of duty in the month of January last as attending physician to the out patient department of the Montreal General Hospital, a patient, a young man of muscular build, whilst holding a wedge accidentally put his thumb over the end of it, and the man who was driving the wedge brought down his 24 lb sledge upon the thumb crushing it and rendering amputation necessary, applied for relief.

Dr. Cline administered chloroform during the operation. There was but one artery requiring ligature, which, whilst

I was seizing it, stopped bleeding. On looking round, the patient was making attempts to vomit and presented the appearance of a man suffering from syncope, his pulse imperceptible. I at once lowered his head which had previously been slightly raised, and in a few minutes the pulse returned. I completed the operation but whilst so doing, some one raised the patient's head again, this was succeeded by a second faintness more severe than the former, his pulse again became imperceptible and the respiration stopped, I now raised the foot of the couch as well as depressing his head. Respiration was reestablished by a few movements of artificial respiration by Dr. Cline and sprinkling with cold water, to which stimulant the respiratory muscles responded. Dr. Ross who being in the house I had asked to come to my assistance, when I found the feeble condition of the patient, now came, but pulsation and respiration were fast returning, by keeping the inclined position "tete en bas" for an hour after, he completely recovered. On coming to his senses he informed us that this was his first day's work after an attack of typhoid fever, his weak condition from this cause together with the excessively painful nature of the injury, had probably been the predisposing causes to syncope in this case.

I think that had this proceeding been adopted in some of the cases wherein death has been put down to the effect of chloroform the fatal cases would have been much fewer, and that with this process at hand, and easily applied the risk of fatal results in the use of chloroform is much reduced. The chloroform first inhaled passes into the circulation and is carried by it to the sensorium, which is the first part affected, and long before the whole of the blood in the system can be charged with chloroform, by degrees the different senses are overcome, voluntary muscular irritability is allayed and reflex action of the voluntary muscles is the last of the cerebro spinal functions, to be arrested, and now only the phenomena of organic existence remain. If the action of the anæsthetic be continued the functions

of organic life also are arrested and then death ensues, but if the brain can be supplied with a little blood the functions again return, and one by one the suspended vitality is restored to the senses.

It may be well to consider, whether this gradually increasing feebleness of the heart's action does not point to the medulla oblongata as the source of the movements of the heart, for when the body is inverted it is not only the vertebral and carotid arteries which send oxygnated blood up to the brain, but also the venæcavæ and the spinal plexus of veins which send hither venous blood. Galvanism and other forms of actual stimulants to the hearts action have not been found to produce the same effect as the simple inversion of the body.

Hospital Reports.

MEDICAL AND SURGICAL CASES OCCURRING IN THE PRACTICE OF THE MONTREAL GENERAL HOSPITAL.

Case of Fracture of the base of the Skull.—Recovery. Under the care of Dr. Ross. Reported by Mr. J. DORLAND.

D. P. a young man nineteen years of age, employed in a tobacco factory was brought to the General Hospital on the 9th of February at noon in a semi-conscious condition, bleeding profusely from both ears and from a wound on the right cheek. He had been working on the hoist when a trap-door fell and jammed his head against the sill. He lost a considerable quantity of blood before he reached the hospital. Upon examination, it was found that blood flowed more freely from the right than from the left ear. Blood was effused under the scalp above and behind the right ear, forming a large tumor about three inches square, quite tender to the touch.

There was tenderness also behind the left ear, but no extravasation. No depression of the skull or external fracture could be found. There was a cut two inches in length along the right malar bone; the right eye was ecchymosed, and the whole face bruised and swollen. The extremities had lost neither sensation nor motion; but the muscles of the right side of the face were paralyzed and there was consequently absence of expression on that side and a drawing of the mouth and face towards the left side. He had complete power over the orbicularis muscle, and no difference could be seen in the dilating and contracting of the pupils. He had vomited once while being conveyed to hospital. Temperature 98 °, Pulse 56, Respiration feeble, quite rational but drowsy and inclined to sleep.

One drop of croton oil was ordered, to be repeated if necessary; his hair was clipped, and ice applied to the head; milk and beef tea to be administered liberally. At 2.30 p.m., he vomited again; at 7.30 he complained of great pain above the right ear; blood oozing constantly from that ear. Temp. 99 3-5 °, Pulse 68, Resp. 30.

Feb. 10th. During the night, his bowels acted freely; passed his water at the same time without difficulty. Very drowsy, yet when aroused, is quite rational. Has great difficulty in blowing his nose owing to the paralysis of the right side of his face. Slight oozing from both ears. Great pain is complained of in the right temporal fossa and over the left mastoid process. Right eye is quite closed; Temp, 99 1-5 °; Pulse 66, Resp. 24.

He was ordered the following mixture.

Potas. Bromid. ʒii.
Spts. Chloroform. ʒii.
Tinct. Hyosciam. ʒiv.
Aquae ad. ʒvi. ℥ss. every third hour.

11th Feb. Blood has ceased to ooze from the ears; the right eye is less swollen: he has power to open and close

the lid. Pain above the ears continues and becomes so severe at night, that it prevents him from sleeping.

12th. Bleeding from the left ear began again during the forenoon; none from the right. Paralysis continues, he retains power over the orbicularis; the eyes move together and the pupils contract equally, seems less stupid and drowsy. If a watch be held close to his right ear, he can hear nothing; but at a distance of two inches from the left one, he can distinguish the ticking.

15th. During the last two days bleeding has continued from the left ear, and to-day there was oozing from the right ear as well. The pain which prevents him from sleeping is sharp and steady and is referred chiefly to a point a little above and behind the right ear. The deafness is increased; watch can be heard now at a distance of only half an inch from the left ear. The left pupil is dilated and its action in contracting and dilating is irregular. He has double vision; in looking at one object he sees two, in looking at two, he sees four. The false image is less distinct and is situated to the right of, and on a slightly higher level than, the true one. There is paralysis of the left sixth nerve for the left External Rectus is powerless; this gives a fixity to the left eye, causing the appearance of internal strabismus in the right.

21st. The swelling and pain have been gradually disappearing; the inequality in the pupils still continue. Since the swelling about the right eye has disappeared, he is unable to close that eye completely. A blister was applied behind the right ear.

March 2nd. Bleeding from the ears has entirely ceased; the pain in the head is much less, although at times it becomes still very severe. He has at irregular intervals suffered from pain in the eyes with intolerance of light, the right eye being always more afflicted than the left.

16th. His general health rapidly improved, the paralysis of the face became much less, the pupils equal and the double vision less marked, till on the 16th he was able to

be removed to his home. Throughout the case, the temperature ranged between 98° and 100°, having on only one occasion reached 100 2-5°. The pulse ranged between 48 and 76; the respirations between 30 and 16, the pulse-respiration-ratio varying between 1:2—and 1:4.

Foreign body in the bladder removed by the Lithotrite.—Under the care of GEO. ROSS, M.D., Prof. of Clin. Med., McGill University.

A. D. was admitted into the Montreal General Hospital on the 10th March complaining of peculiar symptoms relating to the voiding of the urine. He states that in the upright position, if he attempts to make water, the stream of urine is almost instantly completely checked, accompanied by a sense of occlusion, and a desire to strain or force to overcome the obstruction. Then on lying upon his side he is able to pass water freely in a large stream. It appears that about two weeks and a half ago he and two other companions got upon a "spree," and the latter, by way of amusement, took to introducing beans and other foreign bodies into the urethra of our patient. He was quite intoxicated at the time and remembers nothing about it, but only surmises this from what he saw on becoming sober, and from what he was told by the others. The symptoms mentioned were observed by him the following morning and have been present ever since. There could be no doubt that he was suffering from the presence of some foreign body in the bladder—its nature, of course, it was impossible to know. A short-beaked bulbous sound was at once introduced by Dr. Ross, and very soon touched the foreign substance. The contact of the sound could be be very distinctly felt by the examining hand, and a moderatley loud click could be made audible to those standing round the bed. It was determined to remove it by the lithotrite the following day, the intention being, if it were found small enough in the diameter grasped, to withdraw it entire through the urethra,

or else, if necessary, to crush and remove it in pieces, (for it must be remembered that the patient had no positive knowledge of the nature of the body). Accordingly, on the 11th of March, a moderate quantity of urine having been purposely retained for some hours, a closed lithotrite was passed into the bladder, and the object sought readily made out lying behind and to the left side. This was then seized in the jaws of the instrument and raised free from the bladder-walls. On making simple pressure upon the male blade it was found that the substance was readily compressible, and not hard or friable. It was therefore squeezed pretty firmly, and the lithotrite withdrawn. It was found to contain the whole compressed substance of a large white bean. It was evident that this had been grasped in the long diameter, and fortunately so, for if seized across its middle it would probably have refused to be extracted whole, and if broken, would almost surely have left some fragments behind which might have given rise to some further annoyance before being got rid of. He was discharged the next day, a happier and a wiser man.

Correspondence.

TORONTO March 25th, 1875.

Editor of Canada Medical and Surgical Journal.

DEAR SIR,—As a member of the Canadian Medical Mutual Benefit Association, and feeling an interest in its welfare, I wish to draw the attention of the members of the profession who are still without its pale, to the fact that it is a real live institution, and that its members are sparing no pains to ensure its success.

It is destined to supply a much felt need, and ought to be the means of drawing the profession together in one strong bond of unity; and we should feel a common inter-

est in supporting and building up an institution which in its way is likely to be productive of so much benefit.

As one applicant expresses himself "He does not think it has come into existence one moment too soon, as especially in the outlying sections of the country the medical men cannot hope to provide a competency for those depending upon them in case they were suddenly taken away, and the organisation presents an opportunity which should render the profession in general grateful to its originators."

Nor need we go to the newly settled districts to find members of the profession who need the benefits the Association affords, as is evidenced by the fact that an appeal is about being made to all the registered practitioners in Ontario to raise a fund to relieve the straitened circumstances of the family of the late Dr. Lizars of Toronto.

On the ground that the late Doctor was a registered practitioner, this action cannot be called in question, and ought to receive our hearty encouragement and liberal support. But on the other hand it should not be forgotten that this is establishing a precedent, which for the same reason should have been established long ago, and must for a similar reason follow every such lamentable occurrence in the future, as the death of a regularly qualified medical practitioner.

But we would scarcely like to place ourselves in such a relation to each other, or in such a position with the world, as a course of this kind would necessarily and inevitably involve.

We could however, by building up and keeping well managed and supported such an association have an amount which would be very acceptable to the representatives of a deceased member, and which we could claim as a right and just due, and not have to feel towards our brethren that it was doled out to us as a charitable pittance, and to the outside world, that such is the result of the efforts of a lifetime spent in unremiting and unrequited toil.

The Association furnished every qualified practitioner with a blank form of application, and while we are pleased with the readiness with which a good number promptly filled up and returned them, still there are many others from whom we have yet to hear, and probably in most cases from indifference. To such we would urge that you give the matter your earnest attention and forward your applications.

Yours truly,

(Signed) MEMBER.

Periscopic Department.

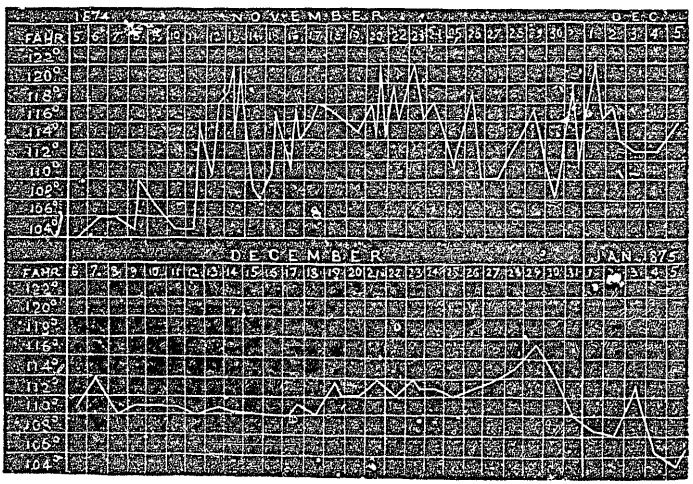
MEDICINE.

Clinical Society of London.—Remarkable Case of High Temperature.

Mr. J. W. Teale then read notes of a case of Remarkable Elevation of Temperature (to 122° F.) after injury to the spine. The patient, a young lady, was thrown in the hunting-field on September 5th, 1874, by her horse taking a standing-jump at a five-barred gate, and, catching his feet in the topmost bar, falling heavily upon its rider. She staggered to her feet after momentary unconsciousness, and was seen by Mr. Teale within five or six hours of the accident. She was then in a state of collapse, and complained of pain in the back; there was fracture of the left fifth and sixth ribs. A few days after her temperature was 101°, but became normal in the space of a fortnight. The fractured ribs united; but although pain and tenderness still existed over the sixth dorsal spine, she retained perfect power in her limbs. She was then seen by Mr. Pridgin Teale, of Leeds, and the conclusion arrived at was that there was subacute inflammation of ligaments. On October 3rd the temperature rose to 100°, and then to 101°; still tenderness and pain; sleep was disturbed, and she now suffered from

jerkings of the legs. In spite of the application of ice-bags to the spine, the temperature slowly rose, reaching 105° on Nov. 3rd, and 106° on the 6th. It was then thought that there was inflammation of the spinal ligaments and intervertebral substance, and probably also of the membranes of the cord. Voluntary power over the lower limbs was still retained. On the evening of Nov. 8th the temperature reached 110°. Leeches were applied to the spine, and mercurial ointment rubbed into the thighs. On the 11th the temperature rapidly rose from 105° (to which it had fallen on the 9th) to 116°; on the 12th it fell to 110°, to rise again to 118°, reaching in the early morning of the 13th the astonishing height of 122°, the index of the thermometer becoming buried in the bulb at the top of the instrument, 122° being the limit of its graduation. A fall of 8° the same day was followed by a rise to 122° again in the evening, while on the 14th it had fallen again to 108°. During this period the pulse kept at about 120, the patient rapidly emaciated and often appeared to be sinking. Deglutition became very painful, and nutrient enemata were had recourse to. The ice-bags and mercurial treatment were still pursued, the latter being left off on the 16th on account of the gums becoming slightly tender. She now began to improve slightly, the pulse falling to 110, swallowing became easier, the twitchings in legs less frequent and the dorsal pain diminished. But, nevertheless, the thermometer recorded most extravagant figures, which were shown to the Society on a chart. (We append below the whole series.) Thus from the 16th Nov. to the 23rd it ranged between 114° and 118°, on two occasions reaching 120°; from Nov. 23rd to the 1st Dec. it fluctuated within wide limits—i.e., between 108° on the 29th to 122° on Dec. 1st, a difference of 10° sometimes occurring between two consecutive observations. From Dec. 1st, it began to subside, reaching on the 8th 110°, which modest level it maintained with but slight variation until the 19th, the only noticeable phenomenon occurring in her general condition,

which still steadily improved, being sudden swelling of the tongue on Dec. 12. Decided improvement still continued save in the course of the temperature which ranged between 112° and 114° from the 19th to the 27th, rising to 117° on the 20th, which proved its final outburst; from thence it somewhat rapidly declined, reaching 105° on Jan. 5th, and becoming normal on the 10th. On Jan. 22nd the patient was apparently convalescent, appetite being good, and thenceforth she took out-door exercise. It was concluded that the cord itself had not been primarily implicated, but



that the rise in temperature must be attributed to the extension of inflammation to the cord. Mr. Teale said that during the case no fewer than seven different thermometers, made by Harvey and Reynolds, had been used, of which four had received Kew certificates. As no ordinary clinical thermometer registered above 118°, one was specially provided which registered 122°; on December 1st the index of this instrument buried itself in the bulb, and as the index measured three inches, the temperature might almost be said to have reached 125°. (The thermometer was

passed round for the inspection of the members. The temperature was generally taken in the axilla, one thermometer on each side, and then the instruments reversed. Usually the readings of the left side were about $\frac{1}{2}^{\circ}$ higher than those on the right, but owing to the patient's emaciated and weakened condition the actual body heat may have been even higher than the record showed. On several occasions the temperature was taken between the thighs; once it showed 116° there, while it was but 113·5° in the axilla. On December 11th it was 111° in the rectum, and 110·4° in the axilla. The patient could never bear the thermometer to be placed beneath the tongue. The thermometers were inspected by two or three trustworthy witnesses before and after each application, and the results were always immediately recorded in writing. No hot water bottles were near the axillæ, as had been good naturedly suggested. Sometimes when the thermometrical readings were highest, the hands, feet, and forehead were icy cold, and the patient remarked that she felt as if "her blood was on fire." The urine was passed with difficulty in hot towels; it appeared a mass of lithates, so that no observations on it could be taken. The menses, which appeared once after the accident, were then suppressed until the 20th of January, when convalescence was established. The chart exhibited showed the rapid alternations of temperature within a few hours but during the space of seven weeks it never fell below 108°, With regard to the nerve-symptoms, there was at no time any distinct loss of sensation, nor any obvious paralysis; but on her recovery it was noticed that the left leg was the weaker of the two. Since the paper was sent in the patient, who had returned home, a distance of 100 miles, having had a normal temperature for five weeks, and been walking about apparently well, has experienced a relapse. At the end of her journey she had a severe hysterical attack (similar to many which she experienced during her illness), and the temperature again rose, once reaching 110°. Better accounts had since been received of her, and although her

temperature was still 105° to 106°, it was not found absolutely necessary to confine her to bed.

The accompanying chart, exhibited at the meeting, shows the temperature during two months. The chart did not allow of accurate estimation of decimals.

Mr. Calender thought the Society much indebted to Mr. Teale for having come so far to read to them so remarkable and unique a case. The highest temperature following on spinal injury with which he had personally met was 107°. He inquired what relation the pulse and respiration frequency held to the temperature in the present case.—Dr. Greenhow said that he did not venture to offer any explanation of this remarkable case. The Transactions of the Society contained several cases of hyperpyrexia occurring in rheumatic fever, and he had only seen one case of that class in which the temperature had reached 110°. He was accustomed to teach that a fatal termination would ensue in a case of rheumatic or other fever in which the temperature rose above 108°, unless reduced by the cold bath. This case bore out what he had always thought, that the high temperature was something superadded to the disease, and probably depended on nervous disturbance. Dr. Farquharson referred to a case of excessive lowering of temperature to (81°) after spinal injury, brought before the Society by Dr. Nieden two years ago, and remarked that, according to some observers, injury to the cord high up produced great lowering of temperature, while others affirmed the exact contrary. Many held that a temperature of 107·5° is incompatible with life; and, moreover, there is acute fatty or parenchymatous degeneration of organs in these cases, as shown by Liebermeister and others, which would render the maintenance of life above that standard impossible. The limits of this resistance to heat must be greatly extended by the present case.—Mr. Jonathan Hutchinson thought that there was an essential difference between these cases of abnormal temperature following lesion of nerve-centres and those which formed part of the

course of a specific fever. He had for some time past been engaged in studying the effects of injury to the spine, and had concluded that there were two classes of opposite facts in injury to the cervical portion of the cord—in the one accompanied by very low, in the other by very high, temperature. He related a case in which life was prolonged five days after fracture of the seventh cervical vertebra. There was complete paraplegia, with priapism, but marked coldness of lower limbs and penis, the temperature never rising higher than 4° below normal. Several cases are now on record where the temperature fell to 81° or 82°, but perhaps more where it, on the other hand, rose to 110°. But all these were cases of crushing of the cord, and all terminated fatally. In Mr. Teale's case he suspected that there must have been some change taking place in the cord itself, and that the mischief was not wholly external to the cord.—Mr. Pridgin Teale (Leeds) saw the patient at the onset of the very high temperature, it being then 104°, and also three weeks later, when it was 114°. Unless he had known that the temperature was so high, he could not have thought that she was so ill; and it was certainly most remarkable that this great temperature co-existed with apparently good health. From this case alone we must abandon the idea that the temperature *per se* is an element of danger. It is clear that certain nervous injuries are capable of leading to great changes in temperature; and he related a case of fracture of the skull, sustained in the hunting field, in which this reached 109°. After sudden apoplexy the heat of the body is often much raised.—Mr. J. W. Teale, replying to Mr. Callender, said that the pulse at no time exceeded 120, and was usually between 90 and 100, while there was no notable increase in the frequency of the respiration.—*London Lancet.*

*On the Relations between Diphtheria and Scarlet Fever.** By ARTHUR RANSOME, M.A., M.D. Cantab., Lecturer on Public Health in Owens College, Manchester.

The following case shows the close connection between these two diseases.

On February 23rd last year, a boy at school had scarlet fever. He was isolated until March 25th, when his brother saw him and took the complaint. Other cases occurred at the school on the 29th, 30th, and 31st. On April 2nd, one of the masters had a rigor and sore-throat: he left at once, and was seen by me next day. On the third day diphtheritic patches covered the tonsils; but there was no rash. Slight albuminuria accompanied the pyrexia; both disappeared by the seventh day. On April 9th, six days after he arrived at home, his mother was attacked, membranous exudation appearing in both tonsils; but there was no albuminuria, and no rash.

The origin of these cases must surely be traced to the epidemic of scarlet fever at the school; for there were no cases of diphtheria either in the neighborhood of the school or near their home. The close relationship of these diseases has often been pointed out. In the *Report of the Medical Officer to the Privy Council* for 1859, Dr. Burdon Sanderson gives cases of diphtheria and scarlet fever co-existing; there also I find three cases of diphtheria following three of scarlet fever, and the former spreading to a neighbouring cottage. These diseases have much in common. They are alike in their zymotic or epidemic character; both are characterised by high pyrexia; their chief point of attack is the throat and the glands of the neck; and a rash is found in both diseases. Their sequelæ are also similar; suppuration in the lymphatic glands, ulceration of the ears, arthritic affections with or without cardiac complication, kidney-disease and dropsy general or localised paralysis of the nervous system. I have

* Abstract of a paper read before the Epidemiological Society of London, January 13th, 1875.

seen each and all of these consequences after both diseases.

Some physicians have been led by these points of resemblance to regard them as one disease, the same poison producing different manifestations; but in spite of their similarity, I venture to think the differences are too important and too numerous to permit so simple a solution of the problem. In the first place diphtheria is seen to arise directly from scarlet fever. I have never known the converse action. There are other etiological differences. Though both are contagious, diphtheria is less so, and more frequently occurs in single cases. Where several cases occur together, some general cause is probably concerned. Scarlet fever is more frequently conveyed by clothes or other fomites, by attendants on the sick, and it may be conveyed by means of milk. I am not aware that diphtheria has ever spread by any of these means. The two diseases differ in their geographical distribution. Diphtheria is common in India where scarlet fever is unknown. Colonies and all new settlements seem particularly liable to diphtheria; it has appeared in the Australian colonies and in South America, attacking the otherwise healthy town of Buenos Ayres. In Lima, it was noticed that the black races withstand its contagion. It selects high and well-drained districts, when low-lying lands in the vicinity escape. Dr. Blake, in the *Transactions of the Medical Society of California*, mentions a most fatal epidemic at an elevation of 4,000 feet. Many places in England subject to diphtheria are either high or well drained. Scarlet fever also haunts certain places; but these scarlet-fever fields are not at high levels, nor are they those in which diphtheria is especially prevalent. Diphtheria is often connected with defects in the house-drainage, not always due to imperfection in the house-connection with a general sewage system, but to leakage from private cesspools; so that a question of spontaneous origin may arise in this disease, which is hardly admissible with respect to scarlet fever. Season has a different influence on the two diseases: scarlet fever being most prevalent in the autumn,

low barometric pressure and greater humidity in the air favouring its diffusion ; while diphtheria may arise at any season, and, in my own experience, its most virulent epidemics have occurred in the summer months.

Another difference is found in the fact that scarlet fever is not often associated with other diseases, while diphtheritic affections are not uncommon in the course of other pyrexial disorders. It is recorded in the Report of the Diphtheria Subcommittee of the Epidemiological Society, that, in the epidemic of 1861, this disease occurred fifty-seven times alone, thirty-four times in association with scarlatina, nine times with small-pox, seven with measles, six with fever, and three times with ordinary sore-throat, croup, and catarrh. But in the nature and symptoms of the two diseases are points of unlikeness too great to allow us to rank them as varieties of the same species. Thus, the rash of diphtheria is often absent, is very variable as to the time of its appearance; it occurs seldom at the outset of the malady, and I have seen it as late as the third week of its course. The period at which albuminuria sets in is also different, often appearing in severe cases of diphtheria within the first two or three days, whilst in scarlatina it seldom sets in until degeneration of the kidney is commencing. There is, indeed, an entire absence of definiteness about the duration of the symptoms of diphtheria, which of itself marks it off from the regular sequence of events in scarlet fever. I have known it last for six weeks, and even two months, without any evident affection of the cervical glands, but with constant formation of exudation on the fauces or on other mucous surfaces.

The mode in which diphtheria localises itself on the mucous membranes, or on the broken surfaces of the skin, would probably be sufficient to separate it from any other disease. I do not know that scarlet fever ever attacks the larynx ; but I have seen the diphtheritic membrane appear in different cases upon wounds of the skin, upon blistered surfaces, and upon nearly all the mucous membranes of the

body—the lips, cheeks, nose, ears, pharynx, larynx, trachea, and bronchi, and on the anus and vulva; and different epidemics have differed strangely in this respect; in one, the throat would always be the point selected for attack; and in another, the other mucous membranes. It is somewhat remarkable in the latter case that, although the disease was mild and there were no deaths, the subsequent complications were much more frequent and troublesome.

The last point of difference that I shall mention is the fact that, while scarlet fever seldom reappears again in the same individual, diphtheria seems by its first attack to confer no immunity from subsequent seizures; on the contrary, the susceptibility of the throat seems to be rather increased.

Upon taking a survey of all these relations existing between scarlet fever and diphtheria, it is evident that they are distinct diseases, and yet that there is some very close and definite connection between them. Wherein the bond consists, it is not easy to point out. From the manner in which the diphtheritic poison seeks out the highest points of the best-drained localities, it has appeared to me most probable that the virus of this disease must be of a more rarefied and subtle nature than the germs that produce scarlet fever.

It is possible that the nature of some other ferments may throw some light on this subject. I would especially call attention to the discovery by M. Berthelot (*Comptes Rendus*, vol. 1, p. 980) of an unorganised glucosic ferment in an infusion of yeast resembling diastase; also to the fact that one fermentation by organised beings frequently prepares the way for another. It may be suggested, that in one of these ways the singular relations existing between scarlatina and diphtheria might be accounted for. I do not venture to affirm that there is a strict analogy between these fermentative actions and the zymosis of scarlatina and diphtheria; but, as there exist in nature ferments requiring the presence of living germs, and others acting independently of them, so there are disease ferments with

organic germs, reproducing themselves, and others which have no definite term of life, and which are not self-reproductive.

It is probable that, in most cases of fermentation, the living being connected with each kind of this action is of a specific nature, and peculiar to the medium or to the food upon which it lives. In some instances, a ferment either during or at the end of its operation will produce the conditions favourable to the growth of another kind of germ, as seen in the crowd of vibrios appearing at the end of a mycodermic fermentation; so the pyrexial state may produce the condition most congenial to the diphtheritic ferment, whether that may prove to be an organised germ or an unorganised catalytic ferment. As my excuse for offering these suggestions, I will quote, in conclusion, the words of the great philosopher Robert Boyle: "He that thoroughly understands the nature of ferments and fermentation shall probably be much better able than he that ignores them to give a fair account of several diseases (as well fevers as others) which will perhaps be never thoroughly understood without an insight into the doctrine of fermentation." (*Works*, ed. 1744, vol. i, p. 486.)—*British Medical Journal.*

Treatment of the Colliquative Sweating of Phthisis.—The colliquative sweats which so rapidly weaken phthisical patients, and are so disagreeable to them, have necessarily attracted the notice of physicians, and a great number of remedies for this symptom have been cried up. Rayer praises white agaric (Boletus laricis), which he thus gives: ℞. White agaric, gr. xv; ext. opil, gr. ¼.—M. Divide into six pills. One, or two, at night. Rodolphi employs the following formula:—℞. Sodæ bicarb., gr. viij; sulphur sub., bismuth. subnitr., aa gr. ¼. For a powder. One powder every two hours. He also recommends warm alkaline lotions made with:—℞. Carb. potass., ℥iijs; alcohol., ℥iss;

aquæ, ℥xvss. Charvet has warmly praised tannin. His formula is:—℞. Tannin. gr. xv; confect. rosæ gall., q. s. Divide into 36 pills. One to four every night. M. Woillez gives four pillules of gr. iij of tannin two hours before each meal. He sometimes adds extract of rhatany, in doses of one drachm, in a julep. Beau, who believes in an antagonism between phthisis and saturnine intoxication, has vaunted preparations of lead either in pills, as:—℞. Acetate of lead, gr. xv; white agaric in powder, gr. viij. Syrup of opium q, s. for ten pills. From one to four daily. Or in powders:—℞. Acetate of lead, opium, aa gr. viij; sugar ℥ss. Divide into twenty powders. One powder night and morning. Oxide of zinc may also be had recourse to:—℞. Zinci. oxidi,, ext. hyoscyami, aa gr. iij. To be taken, when going to bed. Lately, Drs. Bourdon and Chouppe have insisted upon the employment of ipecacuanha in the sweats of phthisical patients. M. Lasegue has obtained remarkable results from general baths, by no means prolonged, but at a moderate temperature (about 35° Cent. =95° Fahr). M. Gubler, when he has no reason to apprehend albuminuria (a rare occurrence in phthisis), praises the employment of diuretics as a remedy in these cases of phthisical sweating. He gives the patient a wine-glassful daily, of *vin diuretique*. M. Landrieux prefers the diuretic wine of the Charité Hospital (1) to that prepared according to Trousseau's formula, (2) in consequence of the former containing bitter, astringent, and aromatic substances. —*La France Médicale*, Oct. 14.

The use of Iodoform in the Treatment of Venereal Ulcers.

In a letter addressed to the editor of the *Annales de Dermatolgie et de Syphilographie* (No. 6, 1874), Professor T. Profeta, of Palermo, records his experience of iodoform as a local application to hard and soft chancres and to phagedænic ulcerations resulting from the bursting of inguinal buboes. He has obtained the most excellent results both

by washing the ulcers with a solution of iodoform (two or three grains in thirty of glycerine and ten of alcohol), and by simply strewing them with the powdered drug. Of the two methods he prefers the latter, and now adopts it exclusively. Cicatrisation begins soon after the first application, and any pain which was previously present is quickly relieved. Soft chancres heal with amazing rapidity if the iodoform is applied soon after their first appearance. We should state that Professor Profeta's testimony to the value of iodoform is all the more important because he was formerly extremely sceptical on the subject, and believed the accounts of its efficacy reported by some observers to be exaggerated. His faith in it dates from the rapid recovery of one of his own friends, who had been treated with all kinds of remedies for a phagedæmic ulcer in the groin of more than a year's standing, and which healed completely in one month when dressed with iodoform alone. There are two objections to the use of iodoform noticed by Profeta. In the first place, it is an expensive remedy, and secondly, it has an offensive and penetrating odour. The latter quality prevents persons using it who wish to conceal their disease, and it is an obstacle to their entrance into society and to their visiting public entertainments. A patient of Professor Profeta was nearly mobbed at the theatre in consequence of the unpleasant smell which he diffused around him. This incident should make us careful, therefore, in using iodoform in private practice.—*Medical Times and Gazette.*

Action of Jaborandi on the Digestive Organs.

In an article inserted in the *Gazette Médicale* for March 20, Dr. Albert Robin, who has been making under the auspices of Prof. Gubler so elaborate an investigation into the properties and action of jaborandi (*Pilocarpus pinnatus*), enters at some length into a consideration of the effects it sometimes produces on the digestive organs.

Salivation, exudation, and the increase of the lachyrmal, nasal, and bronchial secretions, he observes, are normally, with rare exceptions, the sole actions induced by this drug. This is what occurs in the physiological condition of subjects who are in good health, its influence on the digestive tube being quite trifling,—the patient sweating, spitting, and weeping, without any other immediate phenomenon being produced. But many circumstances may induce a deviation in the action of the agent from its habitual type; and then it is upon the alimentary canal that this is manifested. Therefore, we may lay down an almost absolute rule that wherever the hyper-secretions habitually induced by jaborandi are absent, or undergo a notable diminution in their general and collective intensity, compensatory action is always found in the digestive canal. The phenomena which then ensue are of two kinds—first, the normal, which are nearly constant, and depend upon the general effects of the medicine, of which they are the direct consequences; they are the intense thirst which accompanies and follows sudation, and changes in the appetite, which is sometimes diminished and sometimes exaggerated. Secondly, the accidental, which appear whenever the normal action of the jaborandi is impeded by any cause, or certain precautions have been omitted during its administration; they are vomiting and diarrhœa. This division is not absolute, for vomitting may appear during normal action, but it holds good in the great majority of cases.

1. *Thirst.*—As a general rule, after swallowing a cup of tepid infusion, a sense of warmth is felt in the region of the stomach, and then thirst supervenes and still continues, even after the termination of the sweating. As the result of observation the precept may be laid down that the patients should be prevented drinking to quench their thirst, as this is a frequent cause of vomiting. A little very weak coffee, or a light infusion of peppermint, etc., may be administered.

2. *Appetite.*—This is rarely diminished, but is often increased after the termination of the sweating. One patient,

who in thirty days took jaborandi fourteen times, became more hungry after each administration.

3. *Vomiting.*—This has been met with thirty-eight times in ninety cases—*i.e.*, in 40 per cent. This proportion might lead to the belief that it is one of the normal effects. It is not so; and when the causes of such vomiting are known, it may, in general, be prevented. (*a.*) *Influence of the Dose and Preparation*—viz., when the dose is too large or the leaves too fresh. Vomiting from this cause, which is preceded by nausea, comes on some minutes after taking the infusion, and usually before the medicine has had time to produce its special effects. (*b.*) *Influence of Food:* It is indispensable that the patient should take jaborandi in a fasting condition. This rule is a very important one; for 70 per cent. of those who did not observe it vomited, and that even when one or two hours had elapsed since the meal. The vomiting may take place either at the commencement or in the midst of the sudation—the effects of the medicine being of course less energetic and of shorter duration. (*c.*) *Influence of the Saliva:* It is essential for the patient to be enjoined not to swallow the saliva that is produced during the salivation; for otherwise vomiting will infallibly occur. This takes place at the end of the sudation, it being almost pure saliva that is rejected. (*d.*) *Gastric Hyperscretion:* In some cases in which there has been but slight sudation, at the end of this a colourless, acid fluid is vomited, which is really gastric juice-alkaline. These cases are explained by the deviation of the habitual action of jaborandi, analogous to that which is produced in animals who do not sweat, and in whom all the effects of the agent seem to be concentrated on the alimentary canal. The acid and especially the bilious, vomitings are produced whenever sudation is not freely developed, as when it is checked by a chill just as it is about to be produced. After the vomiting, and the diarrhœa which usually accompanies it, the sudation that has been thus interrupted is either not re-established or only imperfectly so. When the existence of a chill can-

not be ascertained, an idiosyncrasy may possibly exist. It is thus seen that in the great bulk of cases the causes of the vomiting may be ascertained and avoided; and this is of importance, as for many persons the nausea and vomiting are such distressing occurrences that they would induce patients to refuse to continue the medicine.

4. *Diarrhœa.*—It not unfrequently happens that just before the sweating commences, or in a few hours after its termination, the patient has one or two soft, or even liquid stools. As after these all goes on as in the normal condition, they are of no consequence. But when there is a deviation in the action of the jaborandi, the vomiting that then occurs is always accompanied by a diarrhœa of various abundance, which is generally produced by colic. It is not, however, of long duration, ceasing, like the vomiting, after some hours, when the active principles of the jaborandi have been eliminated by the gastro-intestinal canal.—*Medical Times and Gazette.*

SURGERY.

The Occurrence of Hemorrhage after Esmarch's Method.

M. Dutrait, one of the *internes* of the Lyons hospitals, in a communication to the *Lyon Médical* for March 7 and 14, furnishes some particulars of the cases in which hemorrhage has followed the employment of Esmarch's method in that city. There, as elsewhere, he says it has taken the place of the principal assistant at operations, and he suspects that there has been some of that indiscriminateness in its adoption which characterises the reception of all novelties. At first its incontestable advantages were alone remarked upon, but now it has been employed with sufficient frequency to allow of a mature judgment being delivered, and several questions of practical importance receiving solutions. In this paper M. Dutrait confines himself to the question of the greater frequency with which

hemorrhage has been observed at Lyons. This he considers according to the three circumstances under which it may occur—viz., immediately after the operation, within twenty-four or thirty-six hours after it, and at the end of several days.

The *immediate* hemorrhage, which ensues on gradually diminishing the compression, although covering the whole surface with blood, is of little consequence, being in fact, chiefly venous; and if, as recommended by M. Gayet, of Lyons, the remaining turns of the compressing bandage are suddenly loosened, the dark venous blood ceases to flow, the smaller arteries which can then be secured only yielding blood.

The *secondary* hemorrhage, also, which takes place at a more or less remote period after the first twenty-four hours, has nothing peculiar about it after this procedure; but that which occurs within the twenty-four hours, and generally in from three to six hours (and which the author terms *hemorrhagie précoce*, as distinguished from that occurring later), is adirect result of the procedure, inasmuch as it is much more rarely met with under other circumstances. There is a general bright red oozing without any tendency to spontaneous arrest; while besides this there are not infrequently jets of blood from small arteries that have escaped the ligature. This hemorrhage is so often observed at Lyons that Dr. Dutrait can only characterise it as the ordinary occurrence; and the application of the apparatus is the same as that employed by Esmarch, except that the constricting-tube is generally replaced by several turns of bandage kept *in situ*. In the present paper notes are given of twenty-eight cases, and an observation by Prof. Courty, of Montpellier, is quoted, to the effect that so habitual is hemorrhage in his cases that as much blood is lost as was supposed to be saved. Of twenty-eight major operations in which elastic compression has been employed, loss of blood occurred in eighteen, and in twelve at least to such an extent as to com-

pel intervention. Hæmorrhage has been oftener met with in amputations than in excisions, and oftener in amputations for traumatic injury than for disease. In the author's opinion, as in that of other Lyons surgeons, the procedure may easily be dispensed with in amputations in which digital compression can be easily effected; but in operations upon the bones and joints its value is very great—in the so-called operations of conservative surgery. In fact, many operations of this kind would be impossible without its aid, and a number of small delicate ones are rendered more practicable, such as the sutures of tendons, ligatures of arteries, the removal of sequestra, the search for foreign bodies, etc., all of which become wonderfully simplified when blood no longer covers the tissues.

The hæmorrhage above described may be best avoided by observing certain precautions:—1. Tie all the arteries that are anatomically described, when they can be detected. 2. After the ligature wait a considerable time without applying any dressings. M. Ollier leaves his patient to recover himself gradually, and then returns to examine whether any hæmorrhage exists. 3. The paralysis of the vaso-motors is rendered more rapid by the employment of hot sponges, which are afterwards kept in contact with the wound for some instants. 4. If these means are thought to require too much time, a modification of the procedure contrived by M. Mollière may be adopted. After having carefully compressed the limb from its extremity, he arrests the application of the bandage at the level of the seat of the operation, and then applies another bandage a few centimetres higher up, terminating it as usual. In this way a space is kept filled with blood, which may be allowed to issue during the application of the ligatures—this greatly favouring the search for the smaller arteries, and the distinguishing them from veins. 5. Whenever it can be used without inconvenience, dressing the wound with *eau de Pagliari* gives great security. 6. The medullary arteries often bleed considerably, and sometimes exclusively; so that the

perchloride or other styptic should not be neglected. 7. In all cases gentle and methodical compression should be applied to the limb. 8. For some hours the patient should be carefully watched, as the hæmorrhage is insidious, and especially when cotton-wool dressing is employed.—*Medical Times and Gazette.*

Cases of Fracture of the Skull.

The first three cases illustrate a fact which surgeons are constantly having brought under their notice—viz., that *a fracture of the base of the skull with laceration of the corresponding portions of the dura mater and arachnoid* may occur, and yet but slight, if any, cerebral disturbance will be caused. From experiments made by Majendie it would appear that in living animals the withdrawal of the cerebro-spinal fluid causes great disturbance of the cerebral functions, by allowing engorgement of the blood vessels. It is, however, much more probable that any such disturbance ought to be ascribed to the shock of the experiment or the admission of air into the subarachnoid cavity. The escape of a watery fluid from one or both ears in cases of fracture of the skull is regarded as a grave symptom; and so, indeed, it is,—for does it not prove that the injury, if it has not reached the brain substance, has at any rate extended further inward than the cranium itself; that the dura mater with its arachnoid layer, which as it passes the roof of the ear, is very adherent to the petrous bone, has been divided; and that a communication—indirect, it is true, but still a communication—has been established between the arachnoid cavity and the surface? It is pretty certain, too, that the injury reaches beyond the parietal layer of the arachnoid; that the visceral layer is also torn, and that thus the subarachnoid space is opened. The arachnoid cavity in its normal state contains but a very small quantity of serous or albuminous fluid, sufficient only to lubricate the two surfaces of the arachnoid membrane during the movements of the brain;

while the quantity of fluid which trickles from the ear after fracture of the base of the skull is often much greater than this slight secretion into the arachnoid cavity will account for. Moreover, it may be made to flow more freely and more rapidly by anything which distends the veins of the head. This fact was proved by Mr. Hilton, in an experiment which he describes in his classical lectures on "Rest and Pain":—

"Some years ago I had in Guy's Hospital, a patient suffering from fracture of the base of the skull, and from one of his ears a thin watery fluid was pretty constantly running. It occurred to me that if I could fill this patient's head more full of venous blood, I might succeed in displacing the cerebro-spinal fluid, and that if the fracture had established an easy communication between the auditory canal and the cerebro-spinal fluid in the interior of the skull, I should be able to force out of the ear some of the cerebro-spinal fluid. I accordingly went to his bedside, and told him to take a very full breath. I then held his nose and lips, and put my fingers so as to compress his jugular veins on each side of his neck. His face became exceedingly congested and discoloured, and he commenced struggling to get rid of the pressure of my hands upon his nose and mouth. This had scarcely taken place before a quantity of thin fluid came running out of the auditory canal, and I succeeded in collecting nearly half an ounce of it The experiment was now completed. I removed my hands from the nose and mouth of my patient, and he quickly recovered his condition of repose. Thus, then, I had succeeded in displacing from the interior of the cranium a quantity of cerebro-spinal fluid (for so it was afterwards proved to be by microscopic and chemical examination), by propelling to the interior of the skull an increased quantity of venous blood."

The gravity of this symptom, beyond that of simple fracture of the bones of the skull, is dependent on the damage done to the membranes of the brain, and the increased risk

of subsequent inflammation of these membranes. At the same time, it must be remembered that in all cases of discharge of cerebro-spinal fluid from the ear, the fracture of the bone has occurred in a situation very favourable to the escape of the brain from injury. It is under the posterior two-thirds of the base of the brain that this fluid is in part situated, and is here acting as a kind of water-cushion to protect the brain from concussion and bruising. It is, no doubt, through this protecting function of the cerebro-spinal fluid that in these three cases, as well as in others like them, the cerebral disturbance has been so transient, if, indeed, as in some instances, any can be said to have existed.

GUY'S HOSPITAL.

Case 1.—*Fracture of Base of Skull—Escape of Cerebro-Spinal Fluid from both Ears—Recovery.* Under the care of Mr. BIRKETT. From notes by Mr. LOWDELL, Ward Clerk.

Jessie C., a girl nine years of age, was admitted into the Martha ward on December 2. Shortly before admission she had fallen downstairs, and had been taken up insensible. When admitted there was a clear watery fluid flowing from the left ear as she was lying on her side; her countenance was pale, and her pupils were dilated. The next morning she vomited a little. The pallor of her face had diminished. She had slept well, and looked better. Her temperature was 99·5°, her pulse 108, and respirations 18. The discharge from her ear was still going on.

December 6—There is scarcely any discharge from the ear to-day. She has taken very little but water.

8th.—Discharge from the ear still continues. Her neck below the ear is sore and inflamed. Lies always on the right side. Her pupils are equal. There is no paralysis, no delirium, and no headache.

15th.—The inflammation about the neck has now disappeared. There is a drop or two of cerebro-spinal fluid in the auditory meatus. Pulse 96; respirations 22; temper-

ature 98·6°. Still kept on fluid diet, and still has ice applied to her head. She is cheerful and lively.

18th.—Going on well. Was allowed some potato and toast to eat, and some tea to drink.

23rd.—Sits up in bed now. Applications of ice to head discontinued. Seems very well.

January 6.—Is dressed to-day, and running about.

February 2.—Is up the whole day; runs about the ward, and is quite well.

University College Hospital.

Case 2.—Fracture of Base of Skull—Clear Fluid from Ear for twenty-four Hours—No Head Symptoms beyond Pain—Convalescing. Under the care of Mr. Heath.

Anne P., aged eighteen months, was admitted on the afternoon of October 15, 1874. At a quarter to one, previously, the child had fallen from a window upon its head on to some flagstones, a distance of about twelve feet. It cried shortly after it was picked up, and bled from the nose and left ear. It was brought to University College Hospital, and admitted at about one o'clock. The mother said it was insensible for about ten minutes.

On admission the child was conscious, and cried when touched. It moved its legs and arms freely. There were no signs of any paralysis. Its skin was pale and cold. There was a swelling over the left eye, which extended slightly into the left eyelid. Both pupils were widely dilated, equal in size, and insensible to light. There was bleeding from the left ear, and from both nostrils. That from the nostrils stopped soon after admission, but that from the ear went on slightly until seven in the evening. There was no subconjunctival effusion. Temperature 96·4°; respirations 13 per minute. Breathing somewhat stertorous; slight blowing of lips. Ordered to take a powder of one grain of calomel every third hour.

The child vomited up the first powder which was given to it, but retained one which was given immediately after-

wards. Wrapped up in flannel; hot water bottles to feet and body; ice-bag to head. 10 p.m.: The child up to now has cried out occasionally. It lies with its eyes closed, but readily cries out when touched. The left eyelid is too much swollen to examine the pupil, but the right pupil acts readily to artificial light. At this time some clear fluid was discovered in the left concha. By turning the child's head round, this was tipped into a test-tube, but on testing it with Fehling's solution, no sugar was detected.

16th.—Patient was sick after the twelve o'clock powder, and again between this and 6 a.m.; bowels open twice. There is still some fluid in the concha, but it is not flowing freely. No ocular extravasation. Both pupils widely dilated, and insensible to light. Child lies quiet, but cries when touched. There is some dried blood about the nostrils this morning. The breathing is now twenty-two per minute, and quiet. Temperature 98·6° ; pulse 120. There is considerable bruising about the left eyelid. The child is in other respects about the same as yesterday; it has taken a little milk at intervals.

17th.—Child slept quietly last night. Bowels have been opened once. Has been taking milk at intervals. Pupils widely dilated, insensible to light. Child lies quiet, but cries when touched. Temperature 97·40; pulse 110; respirations 22.

18th.—Bowels open in the night; motion of a dark green colour. Powder to be taken three times a day.

19th.—Bowels open once again in the night. Child keeps crying, but this is probably due to the ice-bag, Pupils dilated, sensible to light. Temperature 97·4° ; pulse cannot be felt at wrist.

20th.—Patient passed another motion last night of a dark green colour. Temperature 97°. Pupils dilated, sensible to light. Child appeared more comfortable this morning.

22nd.—Going on well. To be made an out-patient.

Prolapse of Funis—Conclusions from an Examination of One Hundred and Sixty Cases.

DR. GEO. J. ENGELMANN (*Amer. Jour. Obstet.*, May July, 1874) furnishes an exhaustive paper on prolapse of funis based upon one hundred and sixty cases. The following are the facts and laws set forth by this study:

The causes of the prolapse of the umbilical cord have mainly proved to be such circumstances as prevent the

complete filling of the pelvic basin, and the close adaptation of the lower segment of the uterus to the presenting part. One of the more important of these circumstances is the shape of the presenting fœtal part itself. We thus find that foot presentations are most frequently complicated by prolapse, whereas vertex presentations are least threatened. The fœtal appendages are of secondary and minor importance; undue length of the cord, its marginal insertion, or attachment of the placenta low down in the uterus, can never be the direct cause of the accident, Excess of liquor amnii is alone to be feared. Some stress is to be laid on abnormity in shape and position of the womb; much more upon twin births. More dangerous than any of these is the contracted pelvis, which is proved by measurements and numbers to be the main cause of prolapse of the funis, directly and indirectly—a fact hitherto generally accepted, but never yet clearly established. These cases disprove the general statement that prolapse is far more frequent among multiparæ than among primiparæ. They show that these two classes are equally liable to this accident.

The law governing the location of the prolapse as of importance is here first treated of.

Post-mortem examinations revealed only the lesions due to death from asphyxia; nothing characteristic for death caused by prolapse of the cord.

The prognosis we can give is somewhat better than generally allowed—most favorable for foot presentations, after these for shoulder and tranverse presentations, while vertex presentations are more dangerous than any; the case being under all circumstances more threatening when occurring in a primipara. In treatment of our cases, the high importance of postural treatment has been developed; more an adjuvant, however, than as a method in itself of dealing with the prolapse.

Version is comparatively the most successful in all operations, and should be more frequently resorted to when any choice of method is given, as in head presentations. The application of the forceps and reposition of the cord are less to be relied upon. But in any course determined upon it must be borne in mind that the success of all operations by which we seek the preservation of the child whose life is threatened by compression of the prolapsed cord is in a measure dependent upon the judicious use of chloroform; its application to full surgical anæsthesia.—*Detroit Review of Medicine.*

CANADA

Medical and Surgical Journal.

MONTREAL, APRIL, 1875.

THE QUEBEC PHARMACY ACT.

Quite an excitement has prevailed amongst the Druggists and Apothecaries since the passing of the Pharmacy Act, and we are pleased to observe that gentlemen desirous of following the business of an Apothecary and Druggist are by the terms of that act obliged to qualify. This is the more gratifying as these gentlemen have systematically ignored the law as it existed prior to the passing of the Pharmacy Act, and refused to qualify on the terms exacted by the College of Physicians and Surgeons of Lower Canada. We give below a notice of the Pharmaceutical Association issued by the Council of that body :

NOTICE is hereby given that at the last Session of the Parliament of the Province of Quebec, an Act to amend the Act of Incorporation of the Pharmaceutical Association of the Province of Quebec, cited as "The Quebec Pharmacy Act of 1874," was passed, said Act giving full control and licencing powers to the Council of the said Association. On and after the first day of May, 1875, it will be unlawful for any person to keep open store for the retailing, dispensing or compounding of the poisons enumerated in Schedule A, or to sell or dispense the said poisons, or to engage in the dispensing of prescriptions, or to assume or use the title Chemist and Druggist, or Chemist or Druggist, Apothecary or Pharmaceutist, or Pharmacist or Dispensing Chemist, within this Province, unless he be registered in accordance with the provisions of this Act as a Licentiate in Pharmacy. It will also be unlawful to employ any clerk or apprentice in any shop or store for the sale of such poisons, or in the dispensing of medicines, except such clerk or apprentice be registered as required by this Act.

Persons offending against the provisions of this Act are liable to a penalty of fifty dollars.

If any person shall falsely represent by any name, title or description that he is registered under this Act, or engage himself as a certified clerk or as a certified apprentice, not being registered as such, he will, upon con-

viction before a Magistrate, be liable to the respective fines as provided for by this Act.

On and after the first day of May, 1875, it will be unlawful to keep or sell any of the poisons named in Schedule A, unless the box, bottle, vessel, wrapper, or cover in which such poison is contained be distinctly labeled on a black label with the name of the article and the word "Poison," and with the name and address of the seller of the poison. And it will be unlawful to sell any such poison to any person unknown to the seller, unless introduced by some person known to the seller; and on every such sale of such article the seller shall, before delivery, make, or cause to be made, an entry in a book to be kept for that purpose, stating in the form set forth in Schedule B of this Act, the date of the sale, the name and address of the purchaser, the name and quantity of the article sold, and the purpose for which it is stated by the purchaser to be required, to which the signature of the purchaser and of the person, if any, who introduced him, shall be affixed; and any person selling such poison otherwise than as herein provided, shall, upon conviction before a Magistrate, be liable to a penalty not exceeding twenty-five dollars, and for the purpose of this section the proprietor on whose behalf any such sale is made by any apprentice or servant, shall be deemed to be the seller.

All persons in business on their own account, prior to the passing of the Act, are entitled to be placed on the Register, and to be certified as "Licentiates in Pharmacy."

All clerks after satisfactory examination before the Board of Examiners of the Association, will be entitled to be placed on the register as "Certified Clerks." All certified clerks, before they can become Licentiates in Pharmacy, must produce evidence that they have been at least four years in a Drug Store, and have attended two Courses of Lectures on Chemistry, two courses on Materia Medica, and one course on Botany.

Every youth, before he is taken as an apprentice by a Licentiate in Pharmacy, shall produce satisfactory evidence of a good moral character, and pass a preliminary examination in the English, French and Latin languages, and arithmetic, after which he shall be registered as a "Certified Apprentice."

Every Licentiate in Pharmacy shall, every year, pay to this Association a fee or subscription of *five dollars* per annum, every certified clerk shall pay to the Association an annual fee of *three dollars*, and every certified apprentice shall pay to the Association an annual fee of *one dollar*. Such fees shall be due on the first day of May in every year, and any Licentiate, Clerk or Apprentice not paying such fee before the first of July, shall be removed from the register, and lose the privileges conferred on him by this Act, but he shall be restored to all his former privileges by the Council of the Association on payment of a fine not exceeding five dollars, if paid before the first of the following October.

Registrations will be made and Certificates granted by the Registrar on application and payment of the required fees; further information, if required, will be given, and copies of the "Poison Book" sold by the Registrar.

ANNUAL CONVOCATION OF McGILL UNIVERSITY.

The Annual Convocation of the McGill University was held in the William Molson Hall of the University, on Wednesday the 31st March, 1875, for conferring degrees in Medicine and Law. There was a large assemblage of the friends of the University, the Hall being filled with ladies and gentlemen. Shortly after three o'clock, the members of convocation passed through the hall and ascended the platform, Peter Redpath, Esq., in the absence of the Chancellor of the University, presiding. Amongst those present we noticed the Most Reverend The Metropolitan; Hon. Attorney-General Church; Hon. Jas. Robertson; Sir A. T. Galt; Solicitor-General Angers, and others.

The meeting was opened with prayer, after which W. C. Baynes, Esq., B.A., Sec'y., read the minutes of the last meeting of Convocation.

The Dean of the Faculty, Geo. W. Campbell, A.M., M.D., then read the following report of that Faculty:

The total number of students attending the lectures of this Faculty during the past session was 129, of whom there were from:

Ontario	67	New Brunswick	3
Quebec	48	P. E. Island	1
Nova Scotia	3	West Indies	2
		United States 5	

The following gentlemen, 32 in number, have passed their primary examinations on the following subjects: Anatomy and Physiology, Chemistry, Materia Medica and Pharmacy, Institutes of Medicine and Botany and Zoology, their names and residences are as follows:

Campbell James, ... London, O.
Colquhoun George, ... Grantley, O.
Cook Guy R., B.A ..... Aultsville, O.
Cooke Wm. Henry, ... Drummondville, Q.
Cream Thos. N., ... Quebec, Q.
Crothers Wm., ... Clarenceville, Q.
Eberle Henry, ... Morpeth, O.

Gray John S., ... Heckston, O.
Greer Thos. A., ... Colborne, O.
Hunt Henry, ... Notfield, O.
Johnson Jas. B., ... Weston, O.
Lang Christopher McL., ... Owen Sound, O.
Levi Reuben, ... Montreal, Q.
McIlmoyl Henry A., ... Iroquois, O.
MacDonnell Richard L., B.A. ..... Montreal, Q.
McRae George, ... Renfrew, O.
Metcalfe Henry J ..... Riceville, O.
Munro Alex. ..... Montreal, Q.
Murray Chas. H., B.A. ..... Montreal, Q.
Powell Robert W ..... Ottawa, O.
Reddy Herbert L., B.A. ..... Montreal, Q.
Ritchie Arthur F., B.A. ..... Montreal, Q.
Robinson Stephen J ..... Brantford, O.
Ross Wm. D ..... Ottawa, O.
Secord Levi ..... Brantford, O.
Smith Wm ..... Lachute, Q.
Snider Fred. S ..... Simcoe, O.
Stevenson Chas. N ..... Sarnia, O.
Stevenson Sabine ..... Cayuga, O.
Storrs Arthur ..... Cornwallis, N. S.
Stroud Chas. S ..... Montreal, Q.
Young Philip R ..... Clarenceville, Q.

The following gentlemen, 31 in number, have fulfilled all the requirements to entitle them to the degree of M.D., C.M., from this University. These exercises consist in examinations both written and oral on the following subjects —Theory and Practice of Surgery, Theory and Practice of Medicine, Obstetrics and diseases of women and children, Medical Jurisprudence and Hygiene,—and also Clinical examinations in Medicine and Surgery conducted at the bedside in the Hospital.

The names of the successful candidates, their residences and the subjects of their theses, are as follows :—

NAME.	RESIDENCE	THESIS.
Bain Hugh U., B.A.	Perth, O.	Clinical Reports.
Benson Joseph B.	Chatham, N.B.	Typhoid Fever.
Bomberry George E.	Tuscarora, O.	Delirium Tremens.
Brossard Jean Bte.	Laprairie, Q.	Hysteria.
Burland William H.	Montreal, Q.	Hospital Reports.
Christie John H., B.A.	Lachute, Q.	Vermes Intestinorum.

Dorland James	Adolphustown, O.	Clinical Reports.
Dowling John F.	Appleton, O.	Typhoid Fever.
Duncan George C.	Port Dover, O.	The Sphygmograph.
Falls Samuel K.	Carp, O.	Acute Rheumatism.
Gilbert Henry L.	Sherbrooke, Q.	Signs of Pregnancy.
Goodhue Perkins J.	Danville, Q.	Congenital Syphilis.
Graham Kenneth D.	Ottawa, O.	Morbus Coxarius.
Hanington Ernest, B.C.	Shediac, N.B.	Clinical Notes.
Hanover William	Packenham, O.	Acute Pleurisy.
Hume William L.	Leeds, Q.	Acute Peritonitis
Jamieson Thomas A.	Lancaster, O.	Diagnosis.
Kearney William J.	Montreal, Q.	Diseases of Menstruation
Langlois Onesime X.	Windsor, O.	Duties of the Accoucheur
Mattice Richard J.	Moulinette, O.	Acute Pleurisy.
McDermid William	Martintown, O.	Vaccination.
Meek James A.	Cornwallis, N.S.	Enteric Fever.
Monk George H.	Montreal Q.	Pericarditis.
Nelles James M.	Brantford, O.	Typhoid Fever.
Ross William D.	Ottawa, O.	Tubercular Meningitis.
Scott William F.	Hull, Q.	Locomotor Ataxy.
Tunstall Simon J. B. A.	St. Ann's, Q.	Surgical Cases.
Ward Michael O'B.	Montreal, Q.	Cataract.
Wigle Hiram	Essex Centre, O.	Abdominal Section.
Woods Edmund J. J.	Aylmer, Q.	Percussion and Auscultation.
Woolway Christopher C.	St. Mary's, O.	Modern treatment of Fever.

Three of the above-named gentlemen, Messrs. Burland, Gilbert and Woolway, are under age. They have, however, passed all the examinations and fulfilled all the requirements necessary for graduation, and only await their majority to receive their Degree.

The following gentlemen passed the examination Theoretical Chemistry:

Henry Greaves,	A. C. Fraser,	W. B. Elliot,
G. Cannon,	Frank L. Miner,	R. Collison,
John Brodie,	C. L. Cotton,	D. H. Cameron,
G. E. Armstrong,	G. A. Park,	L. A. Fortier,
J. A. Lane,	D. J. Quigley,	J. R. McLaren.

Students who have passed the examinations in Botany and Zoology:

BOTANY,

Class I.	Class II.	Class III.
Ayer,	Faulkner,	Riley,
Butler,	Ryan,	Morden,
Cameron, T. D.,	Cameron, P.,	McLeod, J.,

McQuigan, Guerin, Fraser, McCann, McKinley, Vineberg, McLaughlin, Pinsonneault. Campbell, Gibson, Stafford, McLeod, J. A., Greenwood, McCrimmon, Gillis, Hutchinson, Henwood, Smith, Chisholm, Rutherford. Kirk. Collison, Weir, Irwin, Brennan, Fenwick, Farley McDonald, Fogg.

ZOOLOGY.

CLASS I.—Butler

The Medical Faculty Prizes are three in number:

1st. The Holmes Gold Medal, awarded to the graduate who receives the highest aggregate number of marks for the best examinations, written and oral, in both Primary and Final branches as also for an inaugural thesis.

2nd. A prize in books awarded for the best examination, written and oral, in the final branches. The gold medalist is not permitted to compete for this prize.

3rd. A prize in books awarded for the best examination, written and oral, in the primary branches.

The Holmes Gold Medal was awarded to Simon J. Tunstall, B.A., St. Ann's, P.Q.

The prize for the final examination was awarded to Joseph B. Benson, Chatham, N. B. Christopher J. Woolway was prevented by illness on the day of the public written examination from competing for honors, but he deserves special mention as he received the full number of marks at his clinical and oral examinations. Mr. Duncan also deserves special mention for his great mechanical ingenuity in constructing a sphygmograph with improvements of his own for measuring the force and undulations of the arterial Pulse.

The prize for the primary examination was awarded to Charles S. Murray, B.A., Montreal, Q. and Robert W. Powell, Ottawa, O. These two gentlemen received an equal number of marks.

The following gentlemen, arranged in the order of merit, deserve honourable mention :—In the final examination Messrs. Hanington, Hume, Bain, Ross, Falls, Ward, and Scott.

In the primary examination Messrs. MacDonnell, Ritchie, Smith, Levi, Young, Reddy, Secord, Snider, Ross, Hunt, Guy R. Cook, and Sabine Stevenson.

PROFESSOR'S PRIZE.

Botany.	Zoology.
Ayer.	Butler.

Prize for the best collection of plants, C. L. Cotton. Those deserving honourable mention in Botany, Messrs. Butler, F. D. Cameron, and McQuigan. For collection of plants well prepared and determined, honourable mention, James Bell.

PRACTICAL ANATOMY.

Demonstrator's prize in the Senior Class, awarded to John Brodie.

Those deserving honourable mention for care and assi duity, Messrs. A. C. Fraser, James Bell, F. L. Miner, G. E. Armstrong, and William H. Howie.

Junior Class prize awarded to N. Ayer. Honourable mention, Messrs. A. Jamieson, W. B. Gibson, Fred Campbell, F. J. Stafford, and J. J. Guerin.

The Graduates were then called forward and the *Sponsio Academica* was administered by Professor Craik, and each in turn presented to Vice-Chancellor Dawson, who performed the ceremony of Capping, and delivered to each candidate his diploma of Doctor of Medicine and Master of Surgery.

At the conclusion of this ceremony Dr. James M. Nelles of Brantford, Ont., delivered a valedictory address on behalf of his associate Graduates. Dr. Osler, Lecturer on the Institutes of Medicine, then addressed the graduating class on behalf of the Medical Faculty.

After the proceedings of the Faculty of Law, and an address from Principal Dawson, the meeting was brought to a close by the Benediction pronounced by the Right Reverend Bishop Oxenden.

THE LATE DR. WAGNER.

It is our painful duty to announce the death of our old and respected friend and brother practitioner William H. Wagner, M.D., which sad event took place at his residence Dickinson's Landing, Ont., on Wednesday the 7th April, instant, in the 61st year of his age.

The subject of this notice graduated at McGill University in the year 1844, although he previously held a diploma from Jefferson Medical College, Philadelphia, having followed his studies at that Institution. Dr. Wagner possessed a large amount of common sense, a commodity which is often sadly wanting; he was an enthusiast in his profession and always kept up with the progress of the day. As a surgeon he was a cool operator and ready at resources—highly esteemed and respected by the people in his immediate neighborhood he has left behind him many sorrowing friends. Although it is sometimes a difficult matter to fill the place of an old and experienced practitioner, yet in this instance the people of the Landing are fortunate in having amongst them the son of the deceased, Dr. A. D. Wagner a young gentleman of high promise who graduated three years ago at McGill University.

TRANSFUSION.—The transfusion of blood is a medical experiment which should only be tried under the best advice, and even then sometimes produces distressing results. A man named Simpson was, according to one of the American papers, the other day nearly dead from consumption, when Dr. Hopkins, who was attending him, decided to try the

effect of a transfusion of blood. As none of Simpson's friends or neighbours were willing to shed their blood for Simpson's sake, Dr. Hopkins had no alternative but to use Simpson's goat for the purpose, and accordingly, opening the patient's arm injected about two quarts of the goat's blood into the sufferer's system. Simpson began immediately to revive; but his revival was marked by the most disagreeable symptoms. No sooner had his strength returned than he jumped out of bed, and, twitching his head about after the fashion of a goat, made a savage attempt to butt the doctor. Dr. Hopkins, after Simpson's head had been plunged against his stomach three or four times with the force of a battering-ram, took refuge in an adjoining room, whereupon Simpson banged his head against the door with such violence that he would have soon smashed the panels but that his attention was diverted from the doctor by his mother-in-law, who at this moment entered the room. One well-directed blow from Simpson's head floored the unfortunate old lady, and then, as she lay screaming for help, Simpson frolicked round her, making efforts to nibble the green flowers which formed the pattern of the carpet. At last he was securely tied down, but alarmed the whole neighbourhood by his frightful "ba'as." Distressed by Simpson's condition and the reproaches of Mrs. Simpson, Dr. Hopkins determined to undo the evil if possible, and, by heavily bribing an Irishman who was Simpson's servant, procured fresh blood from the faithful domestic and injected Simpson a second time. Simpson is now quite well, but shocks his old Republican friends by displaying an irresistible tendency to vote the Democratic ticket and speaks with a strong brogue. He has only once butted since the last "transfusion." On going into church a few Sundays ago one of the remaining corpuscles of the goat's blood got into his brain, and he butted the sexton half-way up the aisle, recovering himself, however, in time to apologize just as the indignant sexton was about to floor him with a hymn book.—*Pall Mall Gazette.*