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ADDRESS DELIVERED BEFORE THE CANADIAN MEDICAL ASSOCIATION.

By J. E. Graham, M.D., Toronto, President.

Gentlemen :—Before commencing my address, allow me to thank you most sincerely for the great honor you have conferred by electing me to the position of President of the Association. It is a distinction which I value very highly, and hope that I will in some slight degree merit the confidence thus reposed in me.

Last year our meeting was held in the ancient capital—Quebec ; a city whose associations are connected with the past rather than with the present or future. This year we meet in the enterprising and prosperous city of Hamilton. May we hope that from this date our Association will enter upon an era of greater prosperity and usefulness, and that we shall press on to greater achievements in the future. All will at once acknowledge that a great amount of good, honest work has been done in the past, but it is at the same time equally evident that we must put forth greater exertions in the future if we wish our Association to keep pace with the general progress of the Dominion.

A country such as this, which extends from ocean to ocean, and whose inhabitants are certainly not inferior to those of any other civilized nation in enterprise and culture, ought to have a larger and more active association. We must lay broader and deeper foundations, and show greater energy if we would build up an organization which will be an honor to our country.

At our last meeting arrangements were made for the intro-

duction of British Columbia, by the appointment of a Vice-President and Secretary from that Province. Some changes of programme will be inaugurated at this meeting, whereby it is hoped the proceedings may be made more interesting and instructive.

In order to foster the interests of this Association, a more intimate relationship should be established between it and those of a provincial character, and local societies should be established in those provinces where they do not now exist. I would suggest the appointment of a committee, which might confer with existing societies, and report to this Association as to the best means of maintaining and increasing its influence. A relationship such as exists between the great American Medical Association and the various State societies might form a ground-work upon which to build a scheme. While on this point, I will make the following quotation from the report of the Committee on Organization, and presented at the recent meeting of the American Medical Association in Chicago: "The three objects of paramount importance to be accomplished by medical organization are (1) the promotion of direct personal and social intercourse between physicians, by which mutual respect, personal friendship and unity of sentiment are greatly promoted; (2) the more rapid diffusion of medical knowledge, scientific and practical; and (3) the developing, unifying, concentrating and giving efficient practical expression of the sentiments, wishes and policy of the profession concerning its educational, legal and sanitary welfare, and the relations of the latter to the community as a whole." A committee giving due prominence to these considerations, and taking advantage of the experience of similar association in other countries, might form a scheme which, if acted upon, would be of the greatest advantage to the profession throughout the whole Dominion.

As an example of what might be accomplisned by greater unity I would mention suppression of the evil which we have to contend against in the matter of lodge or contract practice. No one who understands the kind of work will deny that the system is, as a general rule, one of great unfairness, so far as the medical profession is concerned. I speak from personal experience,

formed in the earlier years of my practice, as well as from knowledge since gathered, when I say that the physician does not, as a rule, get more than twenty-five to fifty cents a visit for lodge work. In many benefit societies the only real benefit derived by the members is the free medical attendance. Of course, many will say, we quite agree with you that the fees are too low and that the system is bad, but how are you going to prevent it? Have we ever, as a united profession, tried to amend it? Have we an organization sufficiently strong to attempt to cope with the difficulty? I think not. If these were the only questions to be dealt with it would be worth all the trouble of making a thorough organization. Then there are the general questions of fees, of ethics, and others of vital importance, about which we have few laws and few methods of enforcing the law.

It has been suggested that in future our meetings should be held only in those cities which are easily accessible to the majority of the members. We are afraid that if the meetings were thus held only in central places the Association would, to a certain extent, lose its national character. If, however, we met only in such cities or provinces as already possessed active local societies the same object would be attained. If the profession of any city or province has sufficient energy and enthusiasm to maintain an active local society there would be no danger of failure in case this body held its meetings in that city or province.

We may safely say that we have in this Dominion a profession not inferior in average ability and culture to that of any country in the world. The examination which was established some years ago by the Ontario Medical Council, and the methods of registration adopted by other provinces, have prevented to a large extent the entrance of inferior merit into the profession. We have thus a better average than would otherwise have been the case.

Is there that feeling of unity among medical men in this country which ought to exist? Is the enthusiasm for the study of science of medicine such as we would like to see? I may be wrong, but I sometimes think that in these points we are not on a par with those of many other countries.

There is no better method of improving the profession in these respects than by the formation of active local societies, so that practitioners may be more frequently brought together. Misunderstandings will be then explained and jealousies removed which would otherwise separate men for years. In these days, when unions and conventions are of such frequent occurrence in the various trades and professions, we lose much by want of organization and want of unanimity.

In looking to the future, there is another point which must be noted and provided for—viz., the formation of specialties. Whatever diversity of opinion may exist with regard to the ethics and utility of specialists, one thing is certain, they have come to stay. The public readily appreciate the fact that a practitioner who devotes himself to one department will in all probability be more capable in that department than one who goes over the whole field of medicine. It is also a fact that many local diseases are relieved and cured more readily and certainly by specialists. It has been the opinion of some that specialism might be developed in smaller cities and towns to a much greater extent than is at present the case. For instance, in a town where there are, say, six practitioners, each one, while attending to his private practice, which would, of course, be of a general character, might at the same time devote himself particularly to some special branch of the profession. An arrangement might be made that in all surgical cases requiring consultation or assistance the one who devotes himself to surgery should be called in; in obscure internal diseases the physician might be summoned; in obstetrical and gynæcological cases the gynæcologist, etc. This is an arrangement which the public would soon learn to understand and to appreciate. A system similar in character has been for some years carried out in some cities of the Dominion with very great success. The arrangement, in order to be successful, would require the strictest honor and integrity on the part of those who entered into it.

My predecessor, Dr. Holmes, in his excellent address, which was listened to with much pleasure in Quebec last year, made numerous suggestions for the future advancement of the pro-

fession in the Dominion. We hope soon to see many of these suggestions acted upon. The profession in Ontario have already made the preliminary arrangements for the establishment of an institution which will be of incalculable benefit to the medical men of the Province, viz., a Medical Reference Library. The joint committee of the Toronto Medical Society and the Ontario Medical Association have already made such advances that we can confidently promise the formation at an early date of a library of some thousands of volumes, which we hope will be largely used by members of the profession. Arrangements will be made whereby books may be sent, on certain conditions, to any part of the Province. It is also contemplated to have the library constantly open, so that members of the profession visiting Toronto may find a home and a place where they can see the latest medical literature.

This is still a young country, and there are many institutions which must be established to place us on an equal footing with older and wealthier nationalities. The fact of our being young should not prevent us thus early laying the foundations of such as will be of the greatest benefit to future generations.

The past year has not been marked by any great discovery in our science. A steady progress has, however, been made in the various departments of medicine and surgery. The confirmation of previous discoveries and the advancement of the limits of our knowledge has been the work of our scientific men.

In abdominal surgery, great advances have been made.

In bacteriology, discoveries are recorded which promise to assist very much in explaining away the many difficulties which constantly beset us in the study of internal disease.

I now turn to a sad portion of the history of the past year—the loss which this Association has sustained by the death of some of its active members. Among these I would mention the name of our late fellow-member, Dr. John Fulton. He was one of our most regular attendants, and always took an active part in everything which pertained to the interest of the Association and of the profession at large. His comparatively early death, together with that of others who have recently been cut off

(Drs. McBride and Hudson of New York, Drs. Fagge, Moxon and Mahomed of London, Eng.), has given rise to the question as to whether there is anything in our modern professional life which causes such early mortality. I have therefore determined to make a few remarks on over-work and its consequences as exhibited in the lives of our medical men.

In those days of intense activity we find frequent evidences of the effects of over-work in the members of the varions professions and callings. In each profession, however, there are certain peculiarities, or peculiar methods of work, which are especially injurious to the human system. Of these, so far as they affect the medical profession, we wish to speak.

The victims of over-work in our profession may be divided into three or four classes. The first class may be illustrated by the following example :

A young physician enters into city practice, and in his eagerness to succeed rapidly engages in lodge and other contract practice. In this way he assumes at once work and responsibilities which ought to belong to riper years. Often, too, he acquires new patients by a spirit aggressive, and sometimes offensive, to his seniors. If he is a conscientious man he will become, more or less, intensely worried about his patients. He will constantly meet with cases entirely new to him, and will be in doubt as to the correct treatment to pursue. He is, at the same time, under the disadvantage of being considered a young man, and they who contract for the services of a physician are generally the most exacting and the most unreasonable. They often make remarks which are exceedingly galling to a sensitive nature. With this kind of practice there is always a good deal of night-work. The patients are usually careless whether they send in the day or night so long as they have nothing extra to pay. If the young physician, as is often the case, falls into a large midwifery practice at the same time, his lot of drudgery—I was almost going to say slavery—is complete. For a few years he does not feel the strain, but sooner or later his constitution gives way. He is frequently subject to severe headache and palpitation of the heart. Symptoms of dyspepsia show

themselves. He finds that he cannot endure night-work so well, and feels a general want of strength. If he is wise he will either give up contract practice or else take a long rest.

A second class of cases are made up of those who early acquire a large country practice. The instances of premature decay are not so frequent in this class, unless the person becomes addicted to stimulants. Although there may be greater fatigue connected with country practice, there is the compensating advantages of pure air and less worry, as the number of patients under treatment is necessarily fewer and expenses of living are less. Many, however, have in the meantime assumed the responsibility of supporting a family, and may not be in a position to give up any of their work. Sometimes they resort to stimulants. This pernicious practice can only have one result, sooner or later—utter and irretrievable ruin. In other cases, the physician works bravely on, and is suddenly cut off by a pneumonia or by a typhoid fever, or some other illness, which could easily have been withstood if the system had been in a sound and normal condition at the commencement.

The third class, in which we hear of the saddest effects of overwork, is composed of those who settle in a large city, and who wish to assume the foremost positions as consulting physicians and surgeons, and to become eminent as teachers or authors.

A young man of this character, with little means, settles in a large city. He sets before him the following tasks: (1) He must make a living from the first. To do this he probably undertakes to teach students in grinding or quiz classes. This, when largely engaged in, is exhaustive work. He also frequently does the night work of an older practitioner, and loses as much rest as one in large practice. (2) He must acquire a reputation as a practitioner. For this purpose he becomes connected with as many hospitals and dispensaries as possible, spending several hours each day in a close and unhealthy atmosphere. (3) He must acquire a reputation as a teacher. For this end he, if possible, becomes connected with a medical school, where he is expected by the older heads to do an enormous amount of work for little or no pay. (4) His tastes and ambition lead him to

become an original investigator of disease, and he has the laudable design of adding to our stock of medical knowledge. To do this he pursues some line of clinical or pathological investigation—a work which may be exceedingly interesting, but which must be carried on largely at night, thus robbing the enthusiast of hours which should be devoted to sleep.

Then he desires a competence for himself and family. To some the fatal idea comes of becoming wealthy. As this cannot be done in the slow way of ordinary practice, they engage in speculation, and we all know how fortunate doctors are when they enter that business.

There are a few of extraordinary constitution who can bear up for many years against such a heavy strain, but they are few indeed. From constant and unremitting work symptoms of brain tire show themselves. The physician complains of frequent headaches, becomes irritable, suffers from insomnia, and finds he is unable to do the usual amount of work; his memory fails, especially in details; bodily weakness, indigestion, inactivity of the liver appear to warn him of his doom in the near future unless he changes his mode of life. Finding himself unable to work he takes a short holiday, feels much improved, and returns to labor in the same way as before. Organic disease may now become developed. The heart becomes weak and irregular. Atheroma of the arteries and consequent apoplexy may lay him aside or may end his career. Bright's disease may show itself. If none of these organic diseases present themselves, the unfortunate may be cut off by some acute disease. Instances are not rare of degeneration of the nerve centres, with consequent melancholia and suicidal mania. This is not a fancy sketch, but one which could be substantiated by many instances. I will mention but one, that of the late Dr. Golding Bird. Dr. Routh, in his book on over-work, gives the following account of an interview with that distinguished man: "I well remember a conversation I had with the late Dr. Golding Bird a few weeks before his death. He was then in the zenith of his popularity, and recognized by all as one of the ablest of our London physicians. I called upon him one morning with a relative to consult him.

Several other medical men preceded me. His rooms were full, and I had to wait three hours ere I could obtain admission to his study and consult about the case. I congratulated him on his success in practice. 'Yes,' he said to me, 'you are right; but I wish, nevertheless, to make your remark a text for a little parting advice. You see me at a little over forty in full practice, my rooms full, and making my several thousands per annum' (I think he said seven), 'and if I die to-morrow I do not leave as many hundreds to my family. All this I have done by sheer perseverence, unceasing hard work, and no holiday. But I am to-day a wreck. I have fatal disease of the heart, the result of anxiety and hard work. I know I cannot live many months, and my parting words of advice to you are these, never mind at what loss, take your six weeks' holiday. It may delay your success, but it will insure its development. Otherwise you will find yourself at my age a prosperous practitioner, but a dying old man.' Six months after this conversation he had put off this earthly tabernacle."

It is my opinion that in such cases it is not the scientific labor which is the cause of trouble, but it is the worry, anxiety and fatigue of family practice, in addition to the scientific work. We all know from personal experience how exhausting it is to visit, day after day, upon a serious case of illness, especially if the patient is a near friend, or one of distinguished position in society. The amount of vital capital lost in these cases cannot be estimated. It is a singular fact that the large majority of cases of over-work occur among consulting physicians. Surgeons and specialists do not suffer to the same extent. The reason of this is not far to seek. The amount of brain-work done by the physician, as a general rule, is very much greater than that done by the surgeon or specialist. The work of the latter, in most cases, is largely of a mechanical nature, and a great portion of their time is spent in manipulation. It is otherwise with the physician. Let us for a moment follow him in his every-day work. He must first attend to his correspondence. This is usually no slight task, especially if he answers all the letters sent by brother practitioners throughout the country asking for

advice in the treatment of certain detailed cases. I hope you will pardon the digression while I make a few remarks on this point. Very often, in fact in the majority of cases, these letters for advice are sent and an answer expected without fee. To read the detailed history of a case, and to give an answer of any value, takes up the greater part of an hour, and incurs quite as much labor as any other consultation. A specialist in Toronto, who is very conscientious in answering these letters, has informed me that the task frequently requires him to remain at his desk until after midnight. The late Dr. Darwin Hudson of New York, when I was last there, complained bitterly of the same difficulty. So much labor ought not to be imposed without remuneration. In case the patient is poor and unable to pay, the consultant or specialist would always be glad to be of any assistance without any reward. In many instances, however, we believe the patients are well able to pay, and the attending physician need only state his intention of consulting by letter, and ask for the fee to have his wishes acceded to.

We will now return to our subject. After the physician has finished his correspondence he is ready to receive patients. Together with a number of minor cases he may have two or three of difficult diagnosis, which may bring into exercise all his resources. He will write a detailed history of each case, and, perhaps, afterwards write his opinion and treatment in a letter to the attending physician. When he has finished a morning's work of this kind he is frequently so exhausted as to wish for the afternoon to rest. But he must then go to the hospital and, perhaps, for one or two hours he examines and tries to make clear to a class of students cases quite as difficult as those of the morning. He then visits his private patients. (On this continent we have yet very few purely consulting physicians.) This may occupy his time until six or seven o'clock. After dinner he works at his lectures or other literary matter, and is at the same time harassed by numberless interruptions until nearly midnight. Then he may, like all medical men, be called up at night, or, if allowed to sleep, wakes up perhaps tired to continue his ceaseless toil. Is it any wonder that so many break down under such a strain.

The development of specialties has also added to the work of the physician. He cannot act simply as a distributing centre, sending one patient to this specialist and another to that; but he must learn to diagnose and treat many local diseases himself. This entails upon him the necessity of acquiring a knowledge of most of the specialties; and now that familiarity with bacteriology is added as an almost necessary accomplishment, the field is too vast to contemplate.

Now what are the lessons to be learned from all this?

1. That the rapid acquirement of a large and lucrative practice is often a great misfortune. It subjects the physician to the enmity of his older calleagues, often with and often without reason. It imposes burdens under which many fall, and it robs him of a happy and useful old age.

2. In the case of those who are ambitious to acquire professional favor for scientific work, the lesson is to avoid over-work. One ought not to try to become a noted physician and a rich man at the same time. It is a rare thing for a physician to amass a fortune: too rare to make it worth one's while to attempt it.

A very important lesson is to notice the first admonition of a general break-down, and to act upon the warning given. One of the best remedies is a prolonged holiday. This serves the purpose of giving the mind a complete rest. A long holiday is but of temporary benefit; the work must be cut down at home. Eight hours' sound sleep must be had at any cost. If the rest is broken by night calls it must be made up in the morning. Some part of each day should be devoted to recreation. These are difficult rules to follow out in practice, but they are quite possible when a determined stand is taken.

Those who habitually over-work must remember that they are thus defeating the very object of their ambition. In the medical profession the best work should be done between 45 and 55. The late Dr. Flint did not issue his celebrated work on "Practice of Medicine" until he was over 50. We know from observation that medical men in health are at their best during those years. This being the case, it should be the aim of an ambitious

physician, above all things, to maintain his health and vigor unti he can reap the fruit of his earlier labor.

The most satisfactory, the most lasting, and the best work is done by those who are careful not to overtax themselves, but who so arrange their business as to take that recreation which the body so much needs.

I would not close this address without referring to the opposite condition : the spirit of apathy and inactivity which blights many physicians' lives. It is far better to live an active life of usefulness, even if one should be the sooner cut off, than to pass through this world as a miserable drone, of little use either to the family or community.

Our active professional and business men, those who shape our destinies as a nation, frequently exhibit one trait of character which might almost be considered a failing, viz., the expectation of immediate results from their labor. This is particularly noticeable in our western provinces and territories. We work hard, and if in a few years the reward of our toil is not within our grasp we chafe under the disappointment, become discontented, and determine either to change the political character of our country or remove to lands where fortunes are said to be more rapidly made.

We have a vast territory, but one in which the material obstacles to rapid advance are great. These very difficulties ought to develop in us qualities of patient endurance and steady perseverance—qualities which will ultimately make this Canada of ours one of the greatest nations of the world.

Let us as physicians, not under the influence of haste and worry, but steadily and perseveringly, work in building up our own profession, so that in all matters which pertain to excellence we may be equal to that of the foremost nations.

A YEAR'S WORK IN ABDOMINAL SURGERY.*

By William Gardner, M.D.,
Professor of Gynæcology, McGill University; Gynæcologist to the Montreal General Hospital; one of the Vice-Presidents of the British Gynæcological Society.

Mr. President and Gentlemen—During the last working year I have opened the peritoneal cavity 38 times. Of these 35 were abdominal sections, the others were total vaginal extirpations of the uterus, and I have included them in the list because the important element of peritoneal section obtains equally in them with the abdominal cases proper. The list I submit includes an unusual variety of cases and conditions, and I venture to think that its recital may be of some interest and furnish material for a useful discussion. Every operation was done in a private hospital, with the most scrupulous attention to cleanliness of the hands of operator, assistants and nurses; and of instruments, sponges and ligatures, but without the use of any antiseptic whatever except to the field of operation—abdominal wall or cavity of the vagina,—where a 1–1000 sublimate solution was always freely used after thorough scrubbing of the part with soap and water. The after-treatment was entirely under my own watching and control, a circumstance to which I attribute great importance in determining the results obtained. The following is a brief classification of the cases with results:

		Recoveries.	*Deaths.*
Ovariotomies	16	16	—
Hysterectomies	2	2	—
Removals of Uterine Appendages	11	10	1
Abdominal section for opening Pelvic Abscess	2	2	—
Puerperal Peritonitis	2	—	2
Abdominal section for Retro-Peritoneal Cyst	1	1	—
Exploratory Operations	3	2	1
Total Vaginal Extirpation of Uterus	3	3	—

Of the ovariotomies several were of exceptional interest. In two there was twisting of the pedicle, giving rise in both to violent pain, and in one of them to severe peritonitis. In the

* Read in abstract before the annual meeting of the Canadian Medical Association, at Hamilton, Sept. 1st, 1887.

latter case, a patient of my friend Dr. Molson, the pedicle was twisted three times; the walls of the cyst, a dermoid, were almost black; adhesions were universal; the second ovary being enlarged and cystic, was also removed; the cavity was washed out and a drainage-tube employed for five days. The uterus was found to be somewhat enlarged, soft and vascular. A suspicion of possible pregnancy flashed across my mind, but the idea was not seriously entertained at the time of the operation. The patient recovered without a bad symptom. Three months afterwards I had an opportunity of examining her, and found her undoubtedly pregnant to about five months, gestation persisting in spite of the rotation of the tumor, with strangulation and consequent severe peritonitis, a double ovariotomy with washing out and drainage, the glass drainage-tube lying behind the uterus and in contact with its posterior wall for five days. This is my second ovariotomy during pregnancy; the first also recovered without a symptom worthy of note. The patient was delivered at full term just six months after the operation. Both mother and child are alive and well to-day.*

The other twisted pedicle case was sent to me by Dr. Vaux of Brockville, and was that of an unmarried woman of 25. She had for several weeks suffered severe pain, unrelieved by morphia in full doses. The twisted pedicle was enormously thickened from œdema the result of obstructed circulation, and the cyst wall much discolored; there were papillomatous growths from its interior, and hemorrhage into its cavity. Recovery was rapid and complete.

In both cases the tumors were small, as is usual in axial rotation, and they are good examples of the many untoward accidents to which all ovarian tumors are liable, and furnish strong arguments in favor of the plea for early ovariotomy.

Another of the series was in a hale old lady of 68, whose recovery from the conditions incidental to the operation was absolutely without any event worthy of note, except slight cystitis, but who on the second day developed pleurisy, which soon became double, with most alarming symptoms. The pulse rose

* See Canada Lancet, February, 1887.

to 180, and was irregular and unequal. She ultimately made a perfect recovery.

In two of the cases the tumors were sarcoma, one being sarcomatous degeneration of a dermoid cyst. In both there were adhesions to intestine and every other structure within reach. In both, washing out and drainage were resorted to. They were desperately severe operations, but both recovered. In one the curious symptom of polyuria developed in the third week, and for several days six to seven pints of urine were secreted. There was great thirst and enormous appetite. These symptoms had completly disappeared before the patient was discharged.

In one case—an enormous tumor—the patient had a successful pregnancy and uneventful delivery at full term, after the tumor had attained considerable size, and she had been tapped four times, once at the interval of a fortnight before her confinement.

In nine of the sixteen cases the condition of the second ovary was such as in my opinion to demand its removal. Such conditions were marked enlargement and cystic disease. The question of the necessity of removing the second ovary under these circumstances has given me some anxiety in young subjects, as it seems to me it must to every conscientious surgeon. So far as I know there is no known method by which to diagnose on the operating-table a condition comparatively harmless, and which may not prevent successful ovulation and conception from one which is the commencement of a disease that must ultimately demand operation. It is quite certain that all slightly enlarged and cystic ovaries are not commencing ovarian tumors. In a woman who has already attained or is nearing the menopause, the second ovary when in such a condition, or, according to some surgeons, even when apparently perfectly healthy, must always be removed, knowing as we do its proneness to the disease which has required operation for the first. But it is far otherwise in the young woman, married or not, from whom by a double ovariotomy, it may be, needless, all possibility of realization of the much cherished hope of maternity is for ever re-

moved. I confess that for myself the question is as yet unsolved. All recently published experience is quite in accord with my own that the double operation does not in the least add to the dangers. It may be remembered that Sir Spencer Wells' statistics seemed to indicate an opposite conclusion.

The operation of removal of the appendages is one, now-a-days, of even more interest than ovariotomy, because more recent and inasmuch as it involves certain questions not yet quite solved to the satisfaction of everybody. I can honestly say that some of my cases have given me more satisfaction than anything else in my work during this last, as in former years of my work. The list comprises examples of almost all the conditions for which the operation is ever necessary. Such were pyosalpinx, hæmatosalpinx, pelvic hæmatocele, enlarged and cystic ovaries, and cirrhotic very small ovaries, with and without adhesions from previous pelvic peritonitis. Some have been restored in a few weeks from a life of more or less complete invalidism to health, activity and usefulness. Others have been slow in recovering from the operation, because of secondary inflammation about the pedicle. In others still, nothing could have been more favorable than the after course *quoad* the operation, but the morbid condition of nerve centres which is in some the result of long-continued suffering and habits of invalidism continued for several months to manifest itself in the persistence of pain in the regions whence the diseased appendages were removed, or in some distant reflex symptom, most commonly headache. The single death of the series was from hemorrhage, and it is the only death in the list of which I have any reason to be ashamed, as it might have been prevented if I had been called to the patient in time. As it was, I reached her bedside nine hours after the operation, when she was moribund. The peritoneum was found full of blood, but the ligatures held fast. The exact source of the blood flow was not found, but it was doubtless either a rent of some part of the broad ligaments or one of the suture needle punctures. The operation was a perfectly simple one for cystic ovaries without any adhesions whatever. Some of the operations were the most difficult I have ever had to

encounter, by far more difficult than any but the most difficult ovariotomies, and I think that without washing out and the drainage-tube some of them had scarcely a chance of recovery. It is in such cases, perhaps, more than in any other in the whole range of abdominal surgery that the value of experience becomes apparent in the separation of adhesions and recognition by touch of the educated finger of the parts which must be removed. This all important part of the operation must be done solely by the sense of touch, and in some of my cases the whole operation was done through an inch-and-a-half incision.

Of the miscellaneous cases, the following one of exploratory incision is of exceptional interest: A tumor-like mass of doubtful nature remained after the symptoms of a severe attack of peritonitis in a delicate girl of 30, had subsided. The patient continued to vomit and suffer from great pain and difficulty in defecation. She was much emaciated. On opening the abdomen the peritoneum was found studded in numerous places with tubercle. This was verified by microscopic examination of a portion removed. The mass described was found to consist of the small intestine densely matted together in its own coils and adherent to everything around. The mass was somewhat separated from its surroundings, returned, and the abdominal opening closed, with a drainage-tube in the pelvis. She recovered easily and rapidly from the operation, and for a time was much relieved of her symptoms. For a few weeks she was able to dispense with morphia, which she had taken daily up to the time of operation, and the bowels acted spontaneously and without pain. She survived the operation six weeks, dying of exhaustion. This is my second case of tubercular peritonitis simulating ovarian tumor. The other case will be found recorded in the CANADA MEDICAL AND SURGICAL JOURNAL for June 1885.

In the two puerperal cases the patients were almost *in extremis* and the operations were done as a last resort, but without avail in influencing the symptoms. In both the abdominal cavity was opened, washed out, and a drainage-tube inserted. The conditions found were those of intense general peritonitis, with copious exudations of lymph and pus, and infiltration of ovaries,

tubes and cellular tissue with inflammatory exudation. In neither was there any encysted collection of the products of inflammatory action or evidence of disease in or about the appendages from which the general peritonitis might have started. In one of the cases there had been persistent right iliac pain during the pregnancy, and the symptoms of the fatal illness began by an aggravation of this pain. These facts justified Dr. George Ross and myself in opening the peritoneum in the hope that some condition within the power of surgery to relieve might be found. Puerperal fever was, however, prevailing, and the result of the exploration confirmed the idea that these cases were of septic character. Both patients died within twelve hours of the time of operation, but in neither was death in the least hastened by the operation, so far as an opinion could be formed from the symptoms present when the operation was undertaken, and in one the agonizing pain was at once relieved, an effect which morphia had failed to produce.

The results of exploratory abdominal section for peritonitis, a very recent development, have already proved beyond doubt that many lives may be saved by an operation which in competent hands does not in the least lessen the patient's chances. That peritonitis in the lying-in woman not rarely is of a character and has such an origin that we can occasionally thus save a life has already been amply demonstrated by the experience of Lawson Tait and John W. Taylor of Birmingham, and others. One of Mr. Tait's successful cases I had the good fortune to see and assist at during my stay with him last summer. The kind of case in which we have the best reasons to anticipate success are those of previously existing, perhaps latent disease of ovaries or tubes, such as abscess of the ovary or pyosalpingitis, roused to activity by the process of parturition, and leading, it may be, to general peritonitis. That such conditions not rarely exist was shown by Dr. Grigg, of the Queen Charlotte Lying-in Hospital, in a paper read before the British Gynæcological Society, based on the conditions found in certain autopsies. Other conditions in which the operation is indicated are encysted collections of the products of inflammation in the peritoneum or pelvic cellular tissue. I

believe the time has come when it may with perfect justice be said that in a suitable case of puerperal, pelvic or peritoneal inflammation in which life is threatened, the practitioner is bound to do the operation or have it done for him, and so will save the valuable life of many a wife and mother.

The two hysterectomies recovered, both without any bad symptom. In both I adopted, as in all my previous hysterectomies, the extra-peritoneal method of dealing with the pedicle, clamping it with Koeberle's serre-nœud. It is possible, and much to be desired, that "a more excellent way" (as Keith has it) may yet be devised, but that it has not yet been attained is amply proved by a comparison of the experience of Keith, Bantock and Tait by the extra-peritoneal method, with the published results of Schrœder and Martin in Germany by the intra-peritoneal method. If ever induced to try the latter method, I shall certainly combine it with drainage of the Douglas' pouch through the vagina after Martin's method.

In 19 of the 35 abdominal sections the drainage-tube was used. It was employed in all cases where adhesions were extensive and oozing surfaces remained, and when washing out was resorted to. In the latter case much sponging to remove the water used was thereby saved, as it was sucked out through the drainage-tube. Of all improvements in the technique of abdominal surgery next to the intra-peritoneal ligature, none has so much conduced to success as the use of the drainage-tube. By its employment operations may often be much shortened and the peritoneum saved much labor in the absorption of effused blood, and the patient's chances of recovery correspondingly increased.

Experience in the use of the drainage-tube is an important factor in the amount of good to be gained by it. In the experience of other surgeons I had learnt much as to the kind of case in which to use a drainage-tube, but not much as to the length of time it must be allowed to remain in the wound. I had never seen any definite rules on this point laid down till I read the remarks of my friend Dr. Bantock in his paper on "A Hundred Cases of Abdominal Section" published in the London *Lancet* a few months ago. It is possible to remove the drainage-tube much too soon, and I am sure I have seen ill results in my own

practice from this. Since reading Dr. Bantock's paper I have followed his instructions on this point, and with, I believe, signal advantage. These are, in the main, to the effect that the drainage-tube ought not to be removed till the whole amount of secretion that can be removed from it in twenty-four hours does not exceed one drachm of amber-colored serum.

Next to improvements in the technique of abdominal surgery the after-treatment of cases is of prime importance as affecting the patient's prospects. When in Europe last year I found that Mr. Lawson Tait and Dr. Bantock held very strong opinions on certain questions connected with the management of such cases after operation. One of the principal points on which they agreed is the advantage of the avoidance of opium entirely. During the last twelve months I have uniformly followed this example with the exception of one or two instances, and a comparison with my previous experience has thoroughly convinced me that they are right. As a rule, the pain after an abdominal section is mainly at the needle punctures of the abdominal wall, and almost invariably ceases in twelve hours. A dose of opium or morphia will, it is true, relieve the pain, but it dries the secretions, makes the patient clamorous for drink which it is so important that she should avoid for thirty-six hours, it quiets the bowels and so favors accumulation of flatus, and distension, whereas it is all-important that the peristaltic action of the intestines should be kept up, not only to carry off flatus, but to prevent adhesion of coils of intestine to the pedicle, to raw surfaces whence adhesions have been separated, or to the inner aspect of the abdominal wound, which may lead to obstruction. It is more than probable that most of the deaths after abdominal section attributed to peritonitis in recent years have been due to obstruction.

In my work during the year I have given no opium, and invariably, immediately on the appearance of distension, pain or vomiting, I have given enemas and purgatives with the most signal advantage. I am convinced that in my own experience I have thus seen lives saved, besides a vast diminution of the trouble and difficulty in managing the cases afterwards.

I append the following table of the ovariotomies included in the series :—

OVARIOTOMIES.

NAME, &c.	ORDINARY ATTENDANT.	HISTORY AND SYMPTOMS.	LOCAL CONDITIONS.	OPERATION.	RECOVERED OR DIED.	SUBSEQUENT HISTORY.
E. T., aged 31, unmarried.	Dr. Bingham, Williston, Vt., U.S.A.	Menses began at 14; always regular. General health good. First noticed enlargement 3½ years before operation.	General abdominal enlargement; wave fluctuation, bulging in flanks, flat in front; bowel note not distinct in flanks; girth 36 in.; uterus retroverted, prolapsed, and slightly mobile.	Two and a-half inch incision; no adhesions; parovarian cyst right side, limpid fluid, favorable pedicle; ovary and tube spread out over cyst wall; operation complete in 25 minutes.	Recovered.	Perfect health.
M. B., aged 69, married.	Dr. Hill, Ottawa.	Mother of several children. Menopause many years ago. General health perfect. No symptoms, but tumor first noticed 1½ years ago.	Fluctuation in areas; great enlargement; no tenderness; uterus pushed forward, lying behind pubes.	Multilocular ovarian cystoma; few slight anterior adhesions; tumor is of right side. Severe attack of double pleurisy with rapid pulse, reaching 180, rapidly reduced by digitalis; rapid recovery.	Recovered.	Slight cystitis for a few weeks; two months after operation, a smooth, tender swelling in region of pedicle slowly disappear'd. Otherwise well.
M. C., aged 51, married.	Referred by Dr. R. P. Howard, Montreal.	Menses began at 17; married 30 years; one child 25 years ago; menses ceased eight months ago. Pain in left lumbar region and first signs of tumor one year ago, rapid growth; three months before operation measured 42 inches. Was tapped, 2½ gallons removed, in Burlington, Vt.	Fluctuating tumor; clear note in flanks; no firm areas; 35½ in.; uterus retroverted; moveable 3½ inches by sound.	Unilocular cyst of left ovary; no adhesions; very broad pedicle; ligatured in sections; a small dermoid cyst attached to base of large tumor.	Recovered.	Perfectly well.

OVARIOTOMIES—(*Continued.*)

NAME, &c.	ORDINARY ATTENDANT.	HISTORY AND SYMPTOMS.	LOCAL CONDITIONS.	OPERATION.	RECOVERED OR DIED.	SUBSEQUENT HISTORY.
C. M., aged 53, unmarried.	Dr. James Bell, Montreal.	Menses began at 12; ceased four years ago. Never pregnant. Is much emaciated and sallow; severe abdominal pain, rectal tenesmus and pain. Six months ago first noticed lump in left iliac region. Steady increase of size, with pain. Full doses of morphia for six weeks.	Nodulated, firm tumor springing from left side, extending from pubes to within 2 in. of lower ribs; in parts elastic feel; uterus moveable; marked induration in posterior cul-de-sac and recto-vaginal septum; girth of abdomen 34 inches.	No adhesions: favorable pedicle; multilocular cyst of left ovary, jelly-like contents. In Douglas' pouch the induration felt, evidently malignant disease of the rectum.	Recovered.	Recovery from operation rapid and perfect; great relief from pain; no morphia needed for some weeks. Died three months after from cancer of rectum.
M. B., aged 29, married.	Dr. M. C. McGannon, Brockville, Ont.	Menses began at 11; always regular, profuse. Married three years; one child 22 months ago. First noticed tumor in left iliac region 12 months ago, steadily increasing; dysuria last 18 months.	Abdomen enlarged, 32½ inches; uneven fluctuating areas: uterus retroverted, prolapsed and moveable.	Multilocular cystoma of left ovary; omental adhesions, grumous contents: favorable pedicle. Three ligatures to omentum; right ovary size of hen's egg and cystic, also removed.	Recovered.	Perfect health.
M. I., aged 39, married.	W. G.	Menses began at 15. Married 14 years: five pregnancies, last 11 months ago. Menses now regular. First noticed tumor Sept. 1884, on left side. Tapped four times, once during last pregnancy two weeks before labor.	Abdomen very large, 45½ inches, uneven, fluctuating over large areas; œdema of hypogastrium; uterus retroverted, prolapsed, and moveable.	Large quantity peritoneal fluid; multilocular cystoma left ovary; omental adhesions; favorable pedicle; right ovary cystic and enlarged, also removed.	Recovered.	Perfect health.
H. S., aged 30, married.	Dr. Beckstead, Lisbon Centre, N. Y.	Menses began at 16; at first scanty, of late profuse and protracted leucorrhœa; pain in hips. Never pregnant. In Jan. '85, diagnosed a pelvic ovarian tumor. No abdominal enlargement till Jan. '87. Rapid enlargement.	Elastic, uneven condition of abdomen, 35 in., fluctuates in areas. Uterus retroverted; sensitive, moveable body felt in Douglas' pouch; tapped two months before operation.	Multilocular cystoma left ovary: no adhesions; favorable pedicle; right ovary size of pullet's egg and cystic, also removed.	Recovered.	Perfect health.

J. B., aged 18, married.	*Dr. Ball, Stanstead, P.Q.*	Menses began at 11; always regular. Married two years, never pregnant. Noticed enlargement four months after marriage. A good deal of pain during last year. Twice tapped during last three months.	Uniform enlargement; general fluctuation; distinct wave. Uterus retroverted, prolapsed. Tumor distinct in pelvis; girth 40¼ inches.	Multilocular cystoma of left ovary; universal anterior parietal adhesions. Three ligatures to bleeding points; drainage-tube.	Recovered.	Perfect health.
M. C., aged 25, unmarried.	Dr. Vaux, Brockville.	Menses began at 17; is quite regular. Good health till two years ago, then began to have occasional attacks of severe pain in right iliac region; this pain almost constant last five months; three months ago tumor first noticed in right iliac region; pain at times very severe, not relieved by morphia; girth 25½ inches.	Tumor is tense, elastic, insensitive, moveable, entirely below umbilicus: uterus anteflexed, pressed down in front of tumor.	No adhesions; cyst wall dark colored; pedicle twisted very thick and œdematous, size of adult's head: contents chocolate-colored fluid; papillomatous growths from interior of cyst, which is unilocular, and of right ovary; left ovary a mass of cysts and of size of pullet's egg, also removed; oozing from pelvis; drainage-tube.	Recovered.	Perfect health.
M. D., aged 20, married.	Dr. James Bell, Montreal.	Menses began at 13. One child 1 year old; suckled ten months. Menses returned at six months; regular till seven weeks before operation. First noticed a lump in right iliac region 3½ mos. ago; steady growth; much pain, irritation of bladder, constipation, pain and difficulty in defecation; great wasting, weakness; pulse 90-100: in bed for 2 months.	Irregular, nodular, sensitive tumor extending up right side of abdomen from pelvis to hypochondrium, very slightly moveable; in places elastic, semi-fluctuating; floor of pelvis indurated; os uteri pushed forwards and to right side; portio-vaginalis obliterated by collar-like induration around it.	Desperately severe operation; adhesions to intestines, omentum and to whole of pelvis; lower part of tumor a friable mass, in which neither ovary nor fundus of the uterus is distinguishable. After enucleation of tumor, the operation finished by clamping cervix uteri and bringing it out at lower angle of abdominal incision. The tumor, a sarcoma with dermoid elements. Washing out and drainage.	Recovered.	Recovery was fairly rapid, interrupted by septic fever for a few days. In third week polyuria, 6 to 7 pints urine daily; great thirst; enormous appetite. Returned home 6 weeks after operation; general and local conditions excellent; 2 months later signs of recurrence; a month later much emaciated, sinking fast; recurrence of growth, fœcal fistula at lower end of abdominal incision; is dying.

OVARIOTOMIES—(*Continued.*)

Name, &c.	Ordinary Attendant.	History and Symptoms.	Local Conditions.	Operation.	Recovered or Died.	Subsequent History
Mrs. S., aged 31, married.	Dr. Molson, Montreal.	Began to menstruate at 19. Married eight years; four pregnancies to full term, last 14 months ago, suckled 10 months; menses returned after weaning; four months ago first noticed a lump in left iliac region; three weeks ago, after a walk, sudden severe pain, vomiting, fever, retention of urine, constipation; full doses of morphia up till time of operation.	A thin-walled, fluctuating cyst size of a child's head, quite tender; uterus fixed, retroverted, quite tender.	Parietal, pelvic and omental adhesions; a dermoid cyst of left ovary; long, slender pedicle, twisted three times around its axis; contents creamy, coagulate solid; cyst wall dark-colored, contains teeth, hair and bone, hair almost black: right ovary enlarged, cystic, also removed; *wash out*, drainage: uterus somewhat enlarged, soft, and of dark-red color.	Recovered.	Three and a half *months later, seen* and examined; is undoubtedly pregnant; 26th Aug., 1887, daily expecting confinement at full term.
M. G., aged 38, married.	Dr. Molson, Montreal.	Married 13 years; before marriage menses irregular, last three years profuse, especially last six months.	Anæmic, *fat*, weak person; flowing continuously; pains in hips, left leg and thigh. The veins of left leg and thigh distended, varicose; during last six months moderate enlargement of abdomen; feels solid thro' *the thick* rigid parietes; uterus fixed.	*Abdominal wall thick*, 1½ inches fat; rigid omentum, adherent to lower parts of parietes; *a cyst* on either side, with broad *attachment, containing* clear, amber-colored fluid with cholesterine crystals. Cysts freely opened but not removed on account of broad attachment and nature of contents; ovaries not distinguishable; washing out, drainage.	Recovered.	Recovery was tedious, but seemed to be complete, when (slowly and with severe pain) an abscess developed in right iliac region. Opened by abdominal section. Complete recovery

M. V., aged 33, married.	Dr. Geo. Ross, Montreal.	Began to menstruate at 11; married 9 years; five pregnancies, last 20 months ago: suckled 15 months. Menses regular last five months; noticed enlargement four months ago; rapid increase for one month, then very slow; slight abdominal pain: losing flesh.	Uniform, fluctuating enlargement, 38½ in.; firm areas and trabeculæ; uterus retroverted, fixed.	Multilocular cystoma of left ovary; anterior adhesions: adhesion of rectum to pedicle, pedicle broad; ligatured in sections: right ovary enlarged and cystic, removed; wash out and drain.	Recovered.	Perfect health.
N. C., aged 22, unmarried.	Dr. J. Stephenson, Iroquois, Ont.	Menses regular, profuse; began at 16. Noticed enlargement 10 months ago; rapid increase. General health perfect.	Uneven enlargement of abdomen; fluctuation in areas; uterus retroverted, lies on floor of pelvis.	Multilocular cystoma of left ovary; no adhesions, favorable pedicle; right ovary cystic, enlarged, size hen's egg, removed; bleeding from rent in right broad ligament; after ligature, oozing; drainage-tube.	Recovered.	On removal of drainage-tube abscess formed, with pain and fever; discharged freely for a few months; silk ligatures came away; complete recovery after some months.
A. S., aged 43, unmarried.	Dr. A. D. Blackader, Montreal.	Menses ceased 4 years ago; healthy till 3 years ago, when began to have pelvic pain. Two years ago a small pelvic tumor in right iliac region, Severe pain last few months. Steady increase of size.	A rounded, firm, tender tumor size of a child's head; uterus not very moveable, retroverted.	Desperately severe operation; tumor solid, very friable, broke down during removal; adhesions to parietes, omentum, intestines and pelvic structures proceeding from right ovary and involving tube; clamping of right corner of uterus; wash out and drain; microscopic examination showed sarcoma.	Recovered.	Recovered from operation, but recurrence and death eleven weeks after operation.
M. A., aged 57, married.	W. G.	Menses ceased five years ago. A few months later, a constant thin, pinkish discharge, which has never ceased.	Uterus enlarged and retroverted; cervix healthy.	Uterus extirpated by vagina. After its removal a cyst of the size of an orange also removed; found to be dermoid.	Recovered.	Good health.

CHLORAL AND BROMIDE OF POTASSIUM IN THE TREATMENT OF TETANUS CASES.

By C. E. Gooding, M.D., Barbadoes, W.I.

It never having been my fortune during my student career—or subsequently, when for many months I haunted the chief hospitals of London—to have met with a single case of tetanus, I naturally became impressed with the idea that this was an exceedingly rare disease—as rare, in fact, as I had been taught to regard it fatal. Such an impression, correct enough with regard to its occurrence in temperate climates, I knew did not hold good in the tropics and among the negroes. Still, I was not prepared to find it so very common. The thirteen cases whose histories are here given have been met with in a general practice extending over little more than two and a half years. Besides these, I can call to mind at least two other cases which were prescribed for as dispensary patients, but which were subsequently lost sight of.

A better idea of the relative frequency of its occurrence may be formed from the following statistics of the Barbadoes General Hospital: During seven years, since 1878, there have been 103 cases of tetanus ont of a total of 14,369 cases of all sorts treated in-door—an average of nearly 15 cases a year, and in the proportion of about 1 in every 140 cases of all sorts treated. The 103 consisted of 54 cases of traumatic tetanus and 49 of the idiopathic variety.

Case I.—A. B., negress, aged 4 years. Great deformity of both feet, so that she has never walked upright, but crawls on all fours. No history of exposure to cold, and no sign of traumatism. Two days before seen complained of a slight pain in the throat; this increased, and was followed by difficulty in swallowing, with stiffness in the neck and pain in the epigastrium. Since the day before, had taken very little nourishment, and had had no sleep owing to constantly recurring spasms. She presented all the symptoms of acute tetanus—expression anxious, features drawn, marked sardonic grin, teeth clenched, head thrown back, abdomen tense, and all the muscles of the trunk

and neck rigid. Her temperature was 101½°, and pulse 100. Clonic convulsions occurred every few minutes, and could be brought on by the slightest touch or noise; during these, there was well marked opisthotonos. Swallowing was impossible, and when attempted everything regurgitated through the nostrils. As nothing could be taken by the mouth, an enema containing 15 grains each of chloral hydrate and bromide of potash in milk was administered, directions being left for it to be repeated every hour until she should fall asleep, and afterwards as often as necessary to control the violence of the convulsions. She slept for about an hour after the second enema, and two were subsequently given during the night whenever the spasms returned in force. The next day, by pouring liquid along the side of the cheek and allowing it to strain through the clenched teeth, she could be got to swallow a little, though still with difficulty. The enemas were now discontinued, and the medicine in smaller doses, as well as nourishment, were subsequently given by the mouth. Under this treatment she made a rapid and uninterrupted recovery, the convulsions becoming gradually less frequent and severe, and ceasing entirely on the eleventh day of her illness. The tonic spasms of the muscles of the neck and abdomen remained somewhat longer, but at the end of another week these, too, had entirely disappeared.

Case II.—H. B. B., negro, male, aged 17 years. After getting wet while at work and remaining in his wet clothes, he noticed next morning a stiffness about his neck and jaws, which gradually extended to his shoulders and trunk. The next day, on attempting to sit up he was suddenly seized with a convulsion which threw him back in bed. This convulsion was followed by others, increasing in strength and the rapidity of their occurrence. When seen on the third day they came on at intervals of only a few minutes. During the stronger spasms he was bowed so that only his head and heels touched the bed. They came on spontaneously, but were also excited by the slightest movement or noise in the room. The abdomen was as hard as a board, and the transverse markings of the recti muscles could be beautifully seen. Temperature 101°; pulse 84; bowels costive. Between

the convulsions, could open the jaws about a quarter of an inch, and swallowed fairly well. Perfect quiet in a darkened room was ordered, and chloral and bromide of potash in large and frequent doses until he should sleep, and afterwards as required. This treatment was continued for two weeks. During this time, whenever the medicine was discontinued for a few hours, the spasms would come on in as full force as ever, but immediately abated or ceased altogether on its resumption. At the end of a fortnight he had made no material advance towards recovery, but remained very much in *statu quo;* he also began to refuse the chloral, complaining that it excoriated his mouth. Opium was therefore now substituted for it, being given in the form of Battley's sedative solution, along with the bromide of potash. While taking the opium the bowels, already costive, became obstinately so, the tongue furred, headache prominent, and the appetite entirely lost; the pulse also became weak, running up over 120, and the temperature increased to 104°, delirium becoming a prominent symptom. At the same time, though the opium produced greater stupor and drowsiness, it did not appear to hold the spasms more in check than the chloral, in favor of which it was abandoned at the end of a week. On the resumption of the latter the bad symptoms soon disappeared, and he was kept under its influence in gradually decreasing doses until the disease wore itself out.

This was a very prolonged case, the convulsions not ceasing entirely until the seventh week. Towards the end of this time they did not occur spontaneously, but could be brought on by any sudden stimulus, as a touch. A certain amount of stiffness and rigidity was appreciable—chiefly in the abdominal muscles—for many weeks more. Stimulants were freely exhibited throughout the entire case.

Case III.—M. A., a mulatto infant aged three days. This was a vagrant midwifery case, the child being admitted with its mother into the parish alms-house on the third day after its birth. The mother complained that it had refused the breast all that day. On examination, the corners of the mouth were seen drawn up, giving the face the characteristic sardonic grin which

could not be mistaken even in so young an infant. Once seen, there is something about the tetanic expression which fixes itself in the memory, and which cannot be mistaken for anything else. No stiffness could be detected in any of the muscles except those of the jaw; the clonic spasms, however, were frequent and strong. The child was in a very filthy condition, and wrapped in a bundle of dirty rags. The navel was very offensive, and a zone of erysipelatous inflammation extended to a distance of nearly three inches all around it. It only lived a few hours after admission, death taking place during a convulsion.

CASE IV.—G. A., quadroon, female aged 18 years. This was a case of idiopathic tetanus coming on a few hours after exposure to cold. The spasms principally affected the abdominal muscles, causing marked emprosthotonos. The muscles of mastication were very slightly involved, and the mouth could be fairly well opened even when the disease was at its height; the muscles of expression, however, were affected and the risus marked. The clonic spasms under the treatment of chloral and bromide of potash ceased in about a week, but the rigidity of the abdominal muscles continued a full month longer before recovery was complete.

CASE V.—A. N., negress, aged 17 years. No history of traumatism. Fell asleep in a draught while perspiring. On awakening, felt chilly and became feverish towards evening. Next morning felt stiff all over and unable to leave her bed. On attempting to eat, found it impossible to do so, as she could scarcely separate her jaws. During the day the tonic spasms became more marked, and towards evening convulsions set in, becoming almost incessant during the night. The following morning, when seen for the first time, she was found living in a miserable hovel which scarcely afforded any protection from the weather. All the voluntary muscles were involved, except those of the hands and eye-balls; convulsions occurred every four or five minutes, lasted each about thirty seconds, and were so violent that she had to be constantly watched and restrained in bed, for once during the night she had been thrown completely

out of bed by them and fallen on the floor. Her jaws were firmly locked, lips bitten, and bloody froth issued from the mouth. She was in a state of deep stupor; temperature 104½°; pulse 136. She was with difficulty got to swallow a draught containing ʒss each of chloral and bromide with some brandy, and fifteen minutes after double this dose was given per rectum. The medicine commenced to take effect in about half an hour, and directions were left for it to be repeated, if necessary. When seen again that morning her condition was much improved: she had had several good snatches of sleep, mind was fairly clear, and spasms abated, while the temperature had gone down to 101.3° and pulse to 116. This change for the better lasted three days, when, unfortunately, she got wet in bed through the leaky roof. The convulsions returned in greater force than ever, causing her to bite her tongue and cheek most horribly. It being impossible to administer anything by mouth or rectum, ⅓ gr. of morphia was given hypodermically, but without effect, and she died soon after during a prolonged convulsion. Her skin was noticed to be exceedingly hot before death, but it was impossible to take her temperature. The thermometer placed in the axilla immediately after death registered 106.7°, and half an hour later went up to 108.1°. Unfortunately opportunity of testing the temperature further was not afforded. When first seen some of the symptoms in this case seemed suggestive of acute uræmia, but this was negatived by the absence of albumen from the urine and the persistence of the *tonic* spasms.

Case VI.—H. C., male negro, aged 9 years. This case was first seen on the second day from the commencement of the attack. Rigidity was so marked that the limbs and body could only be moved as a whole. There was a history of a fall on his chest from a height of about six feet two days before the first seizure. At the time did not seem to be much affected by the fall and went about as usual after. There was a small wound in the ball of the left thumb, which had been pierced by a splinter of wood at the time of his fall. The wound was almost healed, and on careful examination showed no signs of any part of the splinter remaining in it. The usual sedative treatment

was adopted. On the fifth day of his illness a large, tense and very painful swelling was noticed over the upper part of the left thigh, and most marked externally. There was also considerable fever (103°), which had not been present before. As the slightest movement caused great pain and aggravation of the spasm, a thorough examination of the swelling could not be made. It being regarded as probably a commencing abscess (to which, by the way, the negroes seem peculiarly subject), hot poultices were ordered to be applied. The next day the same condition was found, but on making a further examination it was found in addition that there was considerable shortening (2½ inches) of the leg on that side, and at the same time marked eversion. Manipulation of the swelling itself was impossible. Fracture of the upper port of the femur was diagnosed, and this it was afterwards proved to be. No movement could be detected at the seat of fracture, as the contracted muscles surrounding the bone kept it as steady as a splint. There was evidently great over-riding of the fragments, as shown by the great shortening and swelling. It being thought that the fracture was probably caused by a fall from the bed, as happened in *Case V* during a convulsion, the parents, who were very intelligent persons, were questioned, but they positively declared that this had not happened, as one or other of them had always been with him. An attempt was made to keep the parts as much as possible at rest by means of splints, but, as might have been expected, without success. Consequently the healing process was, after all, left entirely to nature. The case went on slowly towards recovery. It was over a month before the clonic spasms ceased, and the rigidity lasted a couple of weeks longer. Eventually, however, he made a good recovery, and is now limping about quite well, but for three inches shortening in the leg and some stiffness in its movements. The fracture seems to have been just below the trochanters. There is a great deal of bony growth about it owing to the impossibility of keeping the parts at rest. This interferes somewhat with the action of the muscles and prevents the very free movement of the limb.

CASE VII.—A. C., negress, aged 4 years, and a cousin

of the preceding. Was suffering from tetanus several days before she came under treatment. A painful accident occurred during the course of the case; while in a convulsion the tongue was caught between the teeth and held there for some time, giving rise to considerable hemorrhage. It could only be released after using great force and prying the jaws open with the handle of a strong spoon. Beyond this there is nothing special to record about the case, which was of the idiopathic variety, and went on steadily to recovery. The convulsions never recurred in any intensity after she was got under the influence of the chloral and bromide. The tongue was for many days greatly swollen, and a small part of the tip sloughed away.

CASE VIII.—J. G., a black boy, aged 14 years. This was another case of the idiopathic variety. The tetanic symptoms had almost entirely disappeared at the end of the second week, when he was carried off by an intercurrent attack of pneumonia.

CASE IX.—E. W., male, black, aged 38 years. Received a severe blow from a heavy stick over the right wrist-joint, which was opened. The pisiform bone had to be removed, but an attempt was made to save the arm, the wound being put up with iodoform and dry dressing. All went well until the third day, when an erysipelatous inflammation showed itself, and extended rapidly up the arm to the shoulder. Several very free incisions were made into the inflamed tissues, and resulted in the arrest of the gangrene and the subsidence of the inflammation as low as the elbow-joint. The forearm was, however, hopelessly disorganized and the patient greatly prostrated. On the seventh day, as the gangrene seemed well limited to the forearm, and with no tendency to spread, it was decided to amputate. Unfortunately, symptoms of tetanus set in on the same day, and the operation was abandoned as hopeless on account of his general condition of prostration. The spasms, though at no time very severe, proved quite refractory to treatment, and he gradually sank and died from exhaustion on the ninth day.

CASE X.—There was nothing remarkable about this case, which was of the idiopathic variety of a mild type, and ended

in recovery. It lasted between two and three weeks, and occurred in a mulatto girl of 5 years.

CASE XI.—This was a case of "lock-jaw" in a negro lad aged 17 years. He was seen on the second day after the development of the disease. The convulsions were very severe; respiration 36 and pulse 90. One grain of the extract of Calabar bean was given, and directions were left for it to be repeated every hour, the respirations meanwhile being carefully watched. When seen five hours later his condition was very alarming. He had had no sleep, but the spasms were much abated; the respirations had gone down to 13 per minute, and there was a distinct pause between each act; the pulse also was reduced to 72, very weak and somewhat jerky; he complained a good deal of nausea and faintness, and was in a profuse clammy perspiration. The Calabar bean was at once discontinued and stimulants freely administered until he rallied from the state of collapse. He was subsequently put on chloral and bromide. It proved a mild case, and he was convalescent in three weeks.

CASE XII.—E. M., negro boy, aged 12 years. There was no traumatism, but all the symptoms of tetanus were well marked. The usual treatment was adopted. On the third day he passed two round worms per rectum. On the fifth day there was no material improvement, the spasms being only kept under control by the medicine. Small doses of santonine, calomel and rhubarb were now given, and resulted in the expulsion of twenty-three more worms during the next three days. This was at once followed by a marked improvement in all the symptoms, so that in one week from the date of taking the santonine the spasms had entirely disappeared.

CASE XIII.—J. W., male negro, aged 30 years. He was first seen as a dispensary patient, to attend which he had walked about two miles without any assistance. He complained only of a fixed pain about the middle of the sternum. This pain had begun the day before, and increased in severity up to the time of his visit; it was paroxysmal in character, and when at its height greatly interfered with respiration. His pulse and tem-

perature were normal, and physical examination gave negative results. A stimulating anodyne liniment was ordered, and a draught of Battley's sedative solution of opium and bromide of potash. Two days after he was seen at his own home with all the symptoms of tetanus. Opisthotonos was so pronounced that in order to get his head into a position to enable him to swallow his medicine his rigid body had to be lifted into a perfectly erect posture on the floor and there supported until he drank it during the intervals of the clonic spasms. Two 60-grain doses of chloral and bromide were given with stimulants before he got the slightest relief, and they were afterwards continued in smaller quantities. Two days after, the spasms had again become so violent that the large doses had to be resumed, but with very slight effect, as he died on the following day, the seventh of his illness.

It is but fair to say that this man's surroundings were most unfavorable, as he lived in a small wooden two-roomed house, one of the apartments being occupied by a gang of noisy urchins whom it was impossible to keep in any way quiet.

In the thirteen cases whose histories are here recorded, it will be noticed that the sexes are nearly equally represented, seven being males and six females. They all, without exception, belonged to the negro race, and ten of them were pure negroes. Their ages vary from three days to 38 years, but no less than eleven of them were 18 years or under. Ten cases were idiopathic and two traumatic, while one was a case of tetanus infantum, which in its characteristics partakes somewhat of the nature of each of these varieties. Eight ended in recovery and five died. Among the latter was a neglected infant of three days, another was complicated with traumatic gangrene, and in a third case death was due to an intercurrent attack of pneumonia when the tetanic symptoms were subsiding. Four or five were treated in the Parish Alms-House, but the majority were attended at their own homes, where the surroundings were very unfavorable.

Case II affords a good example of the great length of time the disease may occasionally last, it being three months before the tonic contraction of the abdominal muscles entirely disap-

peared. In *Case IV* the peculiar aged and drawn expression of the face—the remains of the sardonic grin—remained for many weeks after all other symptoms were gone. Perhaps the most remarkable is *Case VI*, where the violence of the muscular contractions were so great as directly to cause a fracture of the femur. It shows, too, how the most unpromising cases may occasionally pull through. Instances in which fracture of the femur have occurred from this cause are on record. The teeth also are said to have been occasionally shattered by the sudden and violent closure of the jaws.

With regard to the treatment of this grave affection, should any definite exciting cause be made out it should, if possible, be removed at once. Thus a foul wound should be got into a healthy condition as soon as possible, or failing that be excised, or if on an extremity the whole member may have to be removed; worms also and any source of intestinal or other irritation should be got rid of immediately. In cases where no definite exciting cause can be made out, and which are generally ascribed to "taking cold" (a convenient phrase which covers a woeful lot of ignorance), the treatment resolves itself merely into combating those symptoms which immediately threaten to bring about a fatal result. It is probable that tetanus runs a definite course, which nothing seems to check, and that if only the patient can be kept alive long enough the disease will gradually wear itself out. Now the two main causes of death are asthenia, the patient being utterly worn out by the constantly recurring spasms, and asphyxia due to a prolonged spasm, during which the respiratory movements are arrested. The chief indications then are:

(1) To keep up the strength with stimulants and plenty of nutritious and easily assimilated liquid food. Solids cannot, as a rule, be swallowed, and when they can be taken might prove irritating. When the spasms are very strong it is often only possible to administer nourishment by enemata.

(2) To do anything to allay the violence of the spasms. Perfect quiet in a cool and darkened room is a valuable accessory to this end. It is noticed that the muscles relax and spasms cease during sleep, hence to bring about this condition is the

main indication in the treatment. There are a number of drugs which may be employed to effect this result. As, however, treatment has often to be persevered in for weeks on a stretch, it is better to employ those drugs which produce sleep in the most natural way and at the same time least disturb the other functions of the body. A combination of chloral and bromide of potassium I have found to fulfill these indications most effectively. Bromide of potassium acts as a hypnotic, and is one of the best anti-convulsive remedies we possess: it greatly lessens the reflex excitability of the spinal cord. The sleep produced by chloral more nearly resembles the normal sleep of health than that brought about by any other drug. Chloral has a direct hypnotic action on the brain, but probably also causes sleep by producing a condition of cerebral anæmia; this it does through its action on the vaso-motor centre, causing dilatation of the blood-vessels generally. It also has a marked influence on the spinal cord, diminishing and finally abolishing its reflex action. It is also said to weaken the action of the heart, but I cannot say I have noticed this even when given in very large and frequently repeated doses.

It is wonderful what large quantities of these drugs may be taken in tetanus without causing any bad symptoms whatever. Thus (*Case II*) H. B. B., in four weeks, took six ounces and three drachms of chloral and nearly ten ounces of bromide of potassium, besides an ounce of "liquor opii sedativus." The only difficulty in administering chloral for any length of time is, that it is apt to excoriate the mouth, but I have always easily obviated this by giving it in syrup and largely diluted.

In several instances, when the patient has grown tired of the chloral, I have substituted opium for it, but always have had to revert in a few days to the former. For while the opium seemed to control the spasm as well, it caused much greater stupor, together with headache and aggravated constipation.

In one instance (*Case IV*) counter-irritation over the spine was employed, but with very doubtful results—it seemed rather to aggravate the symptoms.

In *Case XI* I administered the extract of Calabar bean in

one-grain doses hourly until five grains had been taken, but its depressant effect on the heart's action and respiration was so alarming that I did not feel myself justified in continuing it. It seems to me that to give such a powerful drug—especially if it is pushed to the degree that Ringer recommends—must endanger the patient's life as much or more than the disease for which it is given, and is not justifiable when we possess other medicines less hazardous and equally potent.

The result of the santonine in *Case XII* was very marked. The disease was evidently kept up, if indeed not caused, by the irritation of worms. I am inclined to think that I have not paid sufficient attention to these parasites in the past, and possibly some of my prolonged cases may have been kept up by the irritation of their presence. They occur very commonly among the negroes, and though none were met with in any of the other cases, this, perhaps, was due to their not being sufficiently searched for.

Society Proceedings.

CANADIAN MEDICAL ASSOCIATION.

The twentieth annual meeting of the Canadian Medical Association was opened in St. Paul's School-room, in the city of Hamilton, on August 31st. Dr. Holmes of Chatham, President, in the chair.

Dr. Holmes introduced the President elect, Dr. J. E. Graham of Toronto.

Dr. McCargow, on behalf of the Hamilton Medical and Surgical Society, read an address of welcome, and extended to the members of the Association a cordial invitation to be present at a conversazione to be held that evening.

The President replied, accepting on behalf of the Association the kind invitation of the Hamilton Medical and Surgical Society.

The minutes of the last general meeting were then read and approved of.

The following were unanimously elected members of the Association: Drs. Cockburn and Biggar of Hamilton, McDermid of Dunvegan, Hunt of Williamstown, Evans of Seaforth, Reynolds of Hamilton, and Ross of Windsor.

The following were appointed members of the Nominating Committee:—

Drs. Hingston, Gardner and Stewart of Montreal; Graham and Grasett of Toronto; Tye of Chatham; Hunt of Williamstown; McDonald and Mullin of Hamilton; Dupuis of Kingston; Eccles of London; Sloan of Blyth; Smith of Seaforth; Mathieson of St. Mary's, and Sir James A. Grant of Ottawa.

The President named the following officers of sections:

Medicine—Dr. John Mathieson, St. Mary's, chairman; Dr. Bruce Smith, Seaforth, secretary.

Surgery—Dr. Bray, Chatham, chairman; Dr. Packard, Thamesville, secretary.

The Association then adjourned.

Afternoon Session.

Dr. McPhedran opened the discussion on Medicine, his subject being *The Pathological Condition and Behavior of the*

Fluid in Empyema. He stated that in few cases of effusion into the pleural cavity do the signs and symptoms maintain the uniformity described in text-books. This is especially true of children, in whom there is usually little alteration in the shape of the chest, and no displacement of the heart. Bronchial breathing and bronchophony are nearly always present—a circumstance few text-books refer to. From the retractile energy of the lung, small effusions are fixed and immovable, not changing position with movement of the patient, as is usually taught. For the same reason the upper border of dulness is not a water-line, but a curved one, with its highest point in the axillary regions. In discussing the pathology of empyema it was pointed out that all English writers, with few exceptions, teach that the cause in no way differs from that of simple pleurisy, except that there is a difference in the constitutional state. Some, however, believe that in a few cases some agency, as yet unknown, is necessary for the production of the suppurative disease. These views are in strange contrast to the advanced and decided views of German authors, who, without exception, attribute this, as well as all other suppurations, to the introduction into the pleural cavity of a specific virus. Micro-organisms are nearly always found in the pus of cases of empyema as in the pus of all acute suppurations. No other theory can account for the production of empyema. The effusion is at first thin, and nearly or wholly serous, but seldom will any means that we can adopt prevent it from becoming distinctly purulent. In the treatment, prompt removal of the pus is necessary by aspiration or free drainage. Aspiration is only applicable to children, and in them it seldom succeeds unless the pus is localized. Free incision is equally safe, and promises more certain success, and should be at once adopted in all cases, with few exceptions, even in children. A free opening was advised, with the removal of a rib if necessary, under the strictest antisepsis. Chloroform was advised in children as the safest anæsthetic. Washing out the cavity was strongly condemned as routine practice, as being usually unnecessary and a proceeding liable to be followed with the gravest danger. Many cases of death have resulted from it, so that if done at all it should be done with the greatest precautions.

DR. MULLIN of Hamilton opened the discussion. He dwelt on the difficulty at times of making a diagnosis, illustrating his remarks by the recital of a few very instructive cases in this relation.

DR. SHEARD of Toronto referred to cases that had been under his observation where suppurative pleurisy was coexistent with pneumonia, rendering the diagnosis very difficult. He insisted on the great value of taking the temperature frequently in enabling us to come to a conclusion.

DR. TESKEY of Toronto was averse to the use of even the hypodermic syringe in doubtful cases. He has seen a serous effusion converted into a purulent one by the use of the syringe.

DR. WHITEMAN of Shakespeare made a few remarks on the diagnosis between pneumonia and empyema.

The President, Dr. Graham, then read the annual address. (See page 129.)

The address on surgery was then delivered by Dr. Grasett of Toronto on "*Obstructed Urinary Outflow.*" He dwelt especially on the two great causes of obstruction, stricture of the urethra and enlargement of the prostate. In the treatment of stricture of the urethra, Dr. Grasett relies principally on the use of flexible bougies. He has found cocaine well adapted to preventing the disagreeable sensations occasioned by the passage of instruments. He injects half a drachm of a four per cent. solution into the urethra. He has found that cocaine also prevents urethral fever.

Sir James Grant of Ottawa and Dr. Hingston of Montreal took part in the discussion which followed the reading of Dr. Grasett's address.

MEDICAL SECTION.

Dr. Mathieson of St. Mary's, chairman.

DR. R. L. MACDONNELL of Montreal read a paper on "*The Loss of Knee-jerk in Diphtheria.*" In eighteen cases of diphtheria under his care in the Montreal General Hospital, there was an absence in ten on the day of admission. The conclusions arrived at were: (1) That in a considerable number of cases the knee-jerk is lost from the beginning of the disease, and thus

affords a valuable means of diagnosis of the nature of the throat affection. (2) That loss of the knee-jerk is the first evidence of the disease having attacked the nervous system. (3) Absence of knee-jerk has no influence on the prognosis.

Dr. W. H. B. Aikins of Toronto gave an interesting account of the *Anthrax Epidemic in Guelph.* The causation of this epidemic is attributed by Dr. Bryce to wool imported from Syria which is used in the factories about Guelph. The washings find their way into the streams, and the cattle from drinking this water become affected. Three rabbits were inoculated with a minute quantity of the blood from one of the infected animals. Two kittens and two guineapigs were treated in a similar manner. Eighteen hours after inoculation one guineapig died, and on cutting into the body the lungs were found deeply congested and the pleural cavities contained a large quantity of serous fluid, which, on microscopic examination, was found to be rich in rod-shaped bodies of uniform breadth and of various lengths. A second guineapig inoculated with this fluid died sixteen hours after, and a third infected from the second died ten hours after. The rabbits and kittens withstood the action of the fluid injected.

Surgical Section.

Chairman, Dr. Bray of Chatham.

A paper was read by Dr. Archibald Malloch of Hamilton, entitled "*Report on Nineteen Cases of Tracheotomies in Diphtheritic Croup.*" The reader strongly advocated early operation and the use of a solution of soda bicarb.; in washing out the tube by means of a feather, followed by a wash of corrosive sublimate. The statistics of the nineteen cases bore out his arguments for the early operations and the methods used in their performance. The paper was well received.

In the discussion of the paper,

Dr. Atherton (Toronto) believed that where the pharyngeal and nasal trouble was considerable, the disease would be so far advanced in the larynx that there would be little hope of the operation. He advocated the operation in the following cases: (1) Where the laryngeal trouble comes on gradually, with slight pharyngeal and nasal obstruction. (2) To secure easy breath-

ing, not with the expectation of curing, but to relieve suffering arising from the dyspnœa.

DR. TRENHOLME (Montreal) followed with a few remarks.

DR. JAMES BELL (Montreal) thought it was a mistake to make the operation early, and related some cases where operation was urged and was refused by the parents, and the children recovcovered. He prefers the low to the high operation. He performs the operation usually without the tube, simply using a clasp merely to keep the edges of the wound apart, or a plug of lint or some such material. He believed making the largest breathing space the main object in not using the tube.

DR. MALLOCH closed the discussion on the subject.

The section then adjourned to meet in the forenoon of Sept. 1.

SECOND DAY, SEPT. 1ST—GENERAL MEETING.

The chair was taken by the President at 10 A.M.

After the reading of the minutes and the introduction of new members, the President appointed Drs. Ross and Stewart of Montreal and Dr. Graham of Toronto a special committee upon Organization, to consider the best means of maintaining and increasing the usefulness of the Association.

Dr. Bantock, President of the British Gynæcological Association, was invited to take a seat upon the platform.

DR. ECCLES of London then delivered the address on Obstetrics, on "*Subinvolution of the Uterus.*" He referred to the cause, diagnosis and treatment of this affection. (This paper will appear in our next number.)

DR. CAMERON of Montreal considers septicæmia the most frequent cause of subinvolution. He compared the vaginal canal to a culture tube, which should be kept sterilized. He accomplished this by insufflation of dry antiseptic powder and placing aseptic jute at the entrance of the canal.

DR. GRANVILLE BANTOCK being invited to speak on this subject, confined his remarks to the treatment. He deprecated the use of strong escharotics. He found that nearly always the correcting of any existing displacements and the application of glycerine and iodine to the cervix were sufficient.

DR. TRENHOLME of Montreal considered that the removal of displacements was the most important part of the treatment.

DR. HOLMES (Chatham) had excellent results from the use of tampons of sheep's wool.

DR. GARDNER'S paper, entitled "*A Year's Work in Abdominal Surgery*," was read in the general meeting by request. It will be found on page 141.

DR. BANTOCK then addressed the Association. He expressed his thanks for the kindness and courtesy which had everywhere been shown him since he set foot on Canadian soil. He had listened with great pleasure to Dr. Gardner's paper, and he was quite in accord with him in the methods of treatment adopted in the several cases. He referred particularly to the case of pregnancy, and thought Dr. Gardner ought to be congratulated upon the result. He then protested against the adoption of Listerism in abdominal incisions. He thought that it was not only unnecessary, but in some cases positively harmful. The application of strong carbolic acid produces necrosed tissue, which afterwards acts as a foreign body, setting up fatal inflammation. He recommended perfect cleanliness; the wounds should be scrupulously clean. The peritoneal cavity should be thoroughly cleansed; no clot of blood or film should be allowed to remain. He laid great stress upon this point, as the blood or film would afterwards act as a foreign body. He did not think it of any importance to prevent atmospheric germs from entering the wound. He paid no attention to the germ theory in abdominal surgery. In proof of the correctness of his views he gave statistics showing that the mortality in ovariotomies had been reduced since the Listerian method had been abandoned. He also agreed with Dr. Gardner in withholding narcotics after an operation. He never gave them. They did harm rather than good. The learned speaker then closed his address by referring to the importance of manipulative skill in these operations. He warned young men not to undertake such cases unless they intended to pay special attention to the subject. He cited statistics from his own experience, showing that as years advanced, and his practical knowledge increased, the results became more and more favorable.

At the conclusion of Dr. Bantock's address, Dr. Rosebrugh of Hamilton moved, seconded by Dr. Worthington of Clinton, "That the thanks of the Association be given to Dr. Bantock for his excellent address, and that he be made an honorary member of the Association." The motion carried amid great applause.

Drs. Trenholme and Hingston of Montreal continued the discussion. They both quite agreed with Dr. Bantock in his views on Listerism and the germ theory. Dr. Hingston did not think the second ovary should be removed unless the cyst is quite large. He had in two or three cases allowed the second ovary to remain when the diseased condition was slight; no bad results followed, and the women had afterwards borne children.

DR. MCCARGOW, on behalf of the Hamilton Medical and Surgical Society, invited the delegates to take a sail per steamer Mazeppa to the Beach, where luncheon awaited the members.

The Association then adjourned.

Business was resumed at 2 P.M., the President in the chair.

DR. STEWART of Montreal gave the address on Therapeutics, the subject being *The Present State of Cardiac Therapeutics.* This paper will appear in a future number.

MEDICAL SECTION.

SIR JAMES GRANT read an interesting paper on "*Renal Calculus and Cheyne-Stokes Respiration,*" which will appear in a future number.

DR. BULLER of Montreal read a valuable paper on "*Headaches in connection with certain Optical Defects.*"

DR. R. L. MACDONNELL of Montreal read a paper on "*The Treatment of Thoracic Aneurism by the Iodide of Potassium.*" The histories of six cases were brought in evidence of the good effect of the drug in cases where rest, quiet and good diet were not obtainable. The most remarkable of the cases was one in which the aneurism had eaten through the sternum and formed a pulsating egg-shaped tumor in the middle of the chest. Under the iodide the aneurism had become so reduced that the edges of the aperture of the sternum could be distinctly made out by the finger. The patient left the hospital much relieved. The

first case on the list presented a symptom of which Dr. MacDonnell claims to have been the first observer. The aneurism formed a pulsating prominence in the back between the scapulæ and the spine, and, it is presumed, caused pressure upon the fifth and sixth intercostal nerves. During a period of two months copious sweating was observed over an area corresponding in outline to the cutaneous distribution of the fifth and sixth intercostal nerves. The patient improved rapidly under the iodide treatment; sweating, pain, dyspnœa and other pressure symptoms subsided, and the patient left the hospital in June, 1886. At date this patient is fairly well, the pulsating area diminished in extent, symptons not troublesome, and he is able to take part in the keeping of a restaurant. There has been no recurrence of the localized sweating.

Dr. Campbell of Seaforth read an account of a very instructive case of "*Albuminuric Convulsions occurring during Pregnancy.*"

The General Secretary read an abstract of Dr. Mills' paper on "*A Physiological Basis for an improved Cardiac Pathology.*" This important paper will be published in full in a future number.

Surgical Section.

Chairman, Dr. Grasett of Toronto.

The section was opened by the reading of a paper by Dr. Hingston of Montreal on "*The Removal of Naso-Pharyngeal Tumors.*" He referred particularly to the removal of fibroid growths, and mentioned the various methods of getting at these growths, but has adopted the following if he cannot get at them by means of the fingers alone, which he is able to do in about half his cases. He cuts across the upper lip just below the nose, going through nearly to the mucous membrane; then a straight cut across the bridge of the nose, and connecting these two by a straight cut along the side of the nose; sawing through the bone and raising the nose over by means of pliers he thus easily gets at the tumor. He illustrated the results in some cases by means of photographs.

The next paper was read by Dr. Cameron of Montreal, the subject being "*Some Practical Points in Aseptic Midwifery.*"

The reader is a germ theorist in the extreme, and believes that germs are the direct cause of puerperal septicæmia. We must have the seed, and we must have the soil; and the rational management of preventing puerperal diseases is to shut the door and prevent the seed getting at the soil. Also sterilize the soil. Do everything to prevent the invasion of the enemy. But if germ has entered, and symptoms are showing themselves, douche out the uterus thoroughly; if this fail, curette to bring away any clot, membrane or placenta. If these means do not control the fever, attend to the nourishment and stimulation.

The paper was decidedly practical and interesting. Drs. McCargow, Wright, Dupuis and Taylor took part in its discussion.

This paper was followed by one by Dr. Johnston, entitled "*Puerperal Peritonitis*," illustrating, by means of the microscope, specimens of pathological uterine tissue resulting from peritonitis, also showing the microbe. He reported a number of cases, including the autopsies, and in all cases micrococcus were found and cultured.

Dr. Dupuis of Kingston followed with a paper entitled "*Removal of the Astragalus.*" He cited two cases of successful operation of this kind, giving good results, with useful limbs. He urged conservative surgery, with strict aseptic procedure.

Dr. Sweetnam of Toronto then read a paper on "*Stricture of the Rectum*," after which the section adjourned.

General Meeting.

The Association resumed its session, the President in the chair.

The President stated that he had received the report on Hygiene from Dr. Cassidy. Owing to want of time it was taken as read.

Votes of thanks were tendered to the President, Secretary and Treasurer, and to the profession in Hamilton for their great kindness and courtesy. A vote of thanks was also given to the authorities of St. Paul's Church for the use of the school-room.

The following were elected officers for the ensuing year:—

President—Dr. George Ross, Montreal.

General Secretary—Dr. James Bell, Montreal.

Treasurer—Dr. Charles Sheard, Toronto.

PROVINCIAL OFFICERS.

For Ontario—Dr. Eccles, London, President; Dr. J. A. Grant, jr., Ottawa.

For Quebec—Dr. Christie, Lachute, President; Dr. Armstrong, Montreal, Secretary.

For New Brunswick—Dr. Currie, Fredericton, President; Dr. Lunam, Campbelltown, Secretary.

For Nova Scotia—Dr. Wickwire, Halifax, President; Dr. Trueman, Sackville, Secretary.

For Manitoba—Dr. Blanchard, Winnipeg, President; Dr. Chown, Winnipeg, Secretary.

For British Columbia—Dr. N. True, New Westminster, President; Dr. Milne, Victoria, Secretary.

The next place of meeting will be Ottawa.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, May 13th, 1887.

J. C. CAMERON, M.D., PRESIDENT, IN THE CHAIR.

Pathological Specimens.—DR. JOHNSTON exhibited specimens from a case of *perityphlitis* in a girl aged 12. There was no lesion found in the brain.

DR. BLACKADER said that he had been called in consultation in the case. The girl complained of pain in the back, right iliac region, and down the right leg. A week before, the attack had set in with vomiting and abdominal pain when the mother had given a purgative. There was no marked rise of temperature (101–102), and the pulse never was high. Abdomen was tender and tympanitic. The child had been brought to him formerly for convulsions, which set in first on right side, then becoming general, lasting about twenty minutes. He had been able, also, to elicit clonic movements of that side, first of the arm, then of the right leg, but they did not become general. These nervous symptoms yielded to arsenic, and her general health was good. The convulsions, however, continued up to three o'clock of the day previous to death.

DR. JOHNSTON exhibited specimens of *tubercle of the trachea* from a case of general tuberculosis, in which several of the rings were exposed from ulceration of the posterior surface. He also exhibited the *sternum and ribs* from a case of *rickets*, in which the *Rachitic Rosary* was well shown from the inside, but not externally.

A Rare Form of Epilepsy.—Dr. Wood then read the following paper on a rare form of epilepsy and exhibited the patient:

Some years ago Dr. William Osler read a paper in this room, in which he spoke of a case of Jacksonian epilepsy. He was fortunate enough to be able to show the brain of the subject and the cortical growth (a small glioma) which gave rise to the epileptiform seizures. I am unable to demonstrate the actual existence of any disease within or about the motor zone of the patient about which I am going to speak, because he is still alive; but I thought it might be interesting to introduce for discussion here, by detailing such a case, the whole subject of false (non-hysterical) epilepsy. The subject of epileptic auræ and the modes of onset in epilepsy has always been an attractive one to me, and I would like to hear from members of this Society in this connection.

Until eighteen months ago the patient, E. B., aged 70, was in fair health. Had never had syphilis, but now suffers and has suffered at times for many years from rheumatic gout, the great toe of right foot being the chief seat of the trouble. Has occasionally had pains (which were set down as rheumatism) in several other joints of his body, but has never been laid up with them. Has never suffered from persistent headache; never had any injury to his head, and his intellectual faculties are well preserved. There is no history of family neuroses. His digestion is fair, and his heart and kidneys are in normal condition. He had his first attack eighteen months ago, and the half dozen attacks which he has had since then are similar to that one, only they seem to be getting worse. He first noticed twitchings of the muscles of the left forearm and face; these twitchings increased in violence, and although he made efforts to control them, they went on getting worse. He then began to experience feelings of fear as of impending danger, and in about a quarter of an hour after the first muscular contraction he thinks he became unconscious for a few moments, but is not certain of it. In half an hour the whole attack was over, and with the exception of a feeling of weakness in the arm, he was all right again. He has had since then, but at no regular interval, some half-dozen attacks, varying little in character from the first one. Nearly every attack has been witnessed by his fellow-workmen or his wife, and I have been able to get a pretty fair account of them. The loss of consciousness lasts but a few moments. Sometimes he has had what he calls double attacks; that is, he will have a second attack a few minutes after the first, which is not as severe as the first, and is not accompanied by unconsciousness. He knows when he is going to have an attack, and will

grasp his left wrist in his right hand and do his best to prevent the spasm from getting worse or from attacking his face. I saw the latter half of one of these attacks, which he declares he can bring on at will, or rather (because the man suffers much from the dread of approaching danger which accompanies the attack) he thinks that when he has a second attack it is due to putting the arm or his body in some uncomfortable position. I was talking to him one day (having reached the house shortly after a seizure) when he said, "There, I am going to have another attack." He grasped his left wrist firmly, but jerking began in the arm, the muscles of the upper arm being most affected. This was shortly followed by twitching in the other muscles of the arm, all growing worse, until the forearm became flexed upon the upper arm; then the muscles of the face began to twitch, and both sides seemed affected just as in true epilepsy. The man meantime made violent efforts to control the spasms, and called to his wife to prevent the flexion of the forearm. She succeeded in straightening it with some difficulty. In five minutes the attack was over, and I am unable to say whether he was unconscious or not. For several days afterwards he complained of weakness in the affected arm. The spasm in this instance and in every other attack was distinctly confined to the left arm and face, beginning first in the arm and extending to the facial muscles. Without the dynamometer test, the grasp of the left hand, several days after an attack, appears to be as firm as that of the right. I do not know why it should be so, but the patellar tendon reflex is wanting in the left leg, and is faint on the right side. The only doubt, it appears to me, in the diagnosis of this case as one of Jacksonian epilepsy, or, in other words, of disease affecting the face and arm centres about the fissure of Rolando, is that matter of loss of consciousness. It seems to me, however, that the clonic muscular contractions, confined to such related groups of muscles as those of the arm and face—the gradual onset—the loss of consciousnes, if at all, but very slight, and coming on near the end of the attack, after the patient has been able to make vain, but intelligent, efforts to prevent the involvement of the other arm and facial muscles—the absence of any history of his falling down,—all these point to a local brain lesion and not to true epilepsy. There was no paralysis in this case, nor any tonic contractions of the muscles, although the patient complains of weakness in the arm for a day or two after an attack. One must conclude that there is no actual destruction of the cortex within the motor area, but that some growth or induration in a situation outside of it irritates,

upon occasions, the centres that preside over the face and arm muscles. In Dr. Osler's case, there was a long-standing contraction of the right foot.

Regarding the treatment of this case, he has been taking, for several months, 5 grs. of potassic iodide, 10 grs. of potassic bromide, and 15 grs. of potassic bicarbonate three times a day, on alternate days, and so far he has been free from attacks. I am watching the case and awaiting developments. Thinking, for obvious reasons, that it was advisable to have his eyes examined, I sent him to Dr. Proudfoot, and I conclude with his report:

"I send you the following notes of E. B.'s case. I am sorry he could not come to see me again, as I wished to examine his colour perception and visual powers, which I could not do before. At the time I examined him I found the humors of the eye perfectly transparent and nothing abnormal, with the exception of the 'disc,' which was somewhat grayish in colour, and there were two or three small collections of pigment at the upper and outer margin, and a narrow atrophic ring extending round the lower and inner third, with a slight depression of the vessels in that region. There was no hyperæmia or other evidence of any very recent trouble, and the patient informed me that his sight was as good then as it had been for some time back."

Discussion.—Dr. Buller said that there were many well-established cases where epileptic attacks were caused by the irritation produced by a shrunken eye-ball. This is especially the case where the choroid coat is undergoing inflammatory changes resulting in the formation of bone. He then called the attention of the Society to the condition of the patient's eye, in which the osseous deposit was perceptible, and said that the irritation produced by the pressure of this hard ring on the ciliary nerves was sufficient to set up sympathetic changes, and perhaps to account for the epilepsy.

Dr. Stewart said the case was evidently one of cortical epilepsy. General epilepsy might be traced to such a source as irritation of the ciliary nerves, but he did not understand how it could produce one-sided epilepsy.

Dr. Trenholme thought Dr. Buller's views were very important; slight but continuous irritation of sensitive nerves is apt to set up epileptic attacks. He thought enucleation of the eye might be performed with benefit.

Dr. Buller, in answer to a question from the President, said that if the attacks recurred he would recommend removal of the eye.

Stated Meeting, May 27th, 1887.

J. C. CAMERON, M.D., PRESIDENT, IN THE CHAIR.

PATHOLOGICAL SPECIMENS.

Ulcerative Endocarditis.—DR. ROWELL exhibited specimens from a case of ulcerative endocarditis.

Bright's Disease.—DR. R. L. MACDONNELL exhibited the heart and kidneys from a case of Bright's disease.

Albuminuric Retinitis.—DR. BULLER shewed one of the retinæ from the above case. The patient had first applied to the ophthalmic clinic on account of loss of sight about two weeks before her death; could then count fingers at a distance of a few feet. Pupils were dilated; ophthalmoscope shewed extensive outbreak of patches of infiltration near macula. Recommended patient to enter hospital for her renal disease. At the autopsy, besides the infiltration of retina, several small hemorrhages and some accumulations of pigment were detected. It was a good example of albuminuric retinitis in a late stage.

Cancerous Angioma.—DR. FENWICK shewed a small tumor removed from the neck of a girl aged 21. When first noticed two years before was about the size of a pea. Local applications had no effect. On removal, was the size of an egg, encapsulated, situated just behind angle of jaw, and apparently very vascular. Patient had had an attack of cynanche four months before the tissue growth was first noticed.

DR. JOHNSTON stated that the growth was a cancerous angioma and exhibited a microscopic section. He thought this was of interest, because in this region remnants of the bronchæ would exist.

DR. HINGSTON considered the attack of tonsillitis as merely a coincidence.

Depressed Fracture of the Skull.—DR. FENWICK shewed a specimen of depressed fracture of skull. Patient, aged 25, was admitted into hospital April 3rd, 1887, in an unconscious state, supposed to have been injured by putting his head through a window of railway car and striking abutment of bridge. Scalp wound over three inches in left parietal region; beneath this a depressed comminuted fracture was noticed. Ecchymosis of left eyelid and conjunctiva. A little bloody serum oozing from left ear. Wound dressed with iodoform and patient given bromide of potash.

April 15th.—Some small pieces of loose bone removed from wound, leaving an opening in skull 2½ by 1 inch. Dura mater

slit up for about an inch, evacuating a quantity of fœtid pus from an abscess in cerebral cortex. Discharge from ear has become purulent. Drainage-tube inserted and wound closed.

April 18th.—Temperature rising for several days; to-day 108.5°. Died at 8 P.M.

Head examined by Dr. Johnston 75 hours after death.—The wound above described was found bathed in pus. On removing stitches where the depressed internal table of parietal bone is exposed diploe has a granulating surface. The incision in dura mater had not united. Line of fracture extends downwards through petrous bone, which is splintered into many little pieces, thence across the lesser sphenoid wing and in front of the anterior clinoid process to the right orbital plate. In the left temporal fossa were two drachms of pus between dura and bone; a good deal of blood extravasated in this neighborhood. Pia mater, in this region and at the base, normal. In the cerebral cortex an abscess the size of a hazel-nut was found just beneath the supra-marginal convolution, which presented a small superficial slough. The abscess did not extend quite as deep as the roof of the left lateral ventricle. On sawing open tympanum, the cavity was found full of pus. The mastoid cells contained a little pus.

DR. FENWICK stated that he had put a stitch in the incised dura; would not do so again in a similar case.

DR. BULLER had seen a case some years ago; patient had been run over by a cart-wheel, by which petrous bone was fractured and several ounces of brain matter escaped through the ear. The patient recovered. Drum membrane was defective in upper and anterior part, and there was a marked deformity in meatus.

DR. FENWICK, in reply to a question by Dr. Buller, did not consider ecchymosis of conjunctiva pathognomonic of fracture of ethmoid bone. Thought tearing of small vessel in sphenoidal fissure might cause it in absence of any fracture of ethnoid, and cited cases where the ethmoid was fractured this sign was absent.

DR. RODDICK asked (1) if he would have opened the skull below the temporal fossa if he had known the state of damage? (No.) (2) If he would have operated in the same manner again?

DR. FENWICK said that he would, citing Banks' case where skull was drained and sinus had dried up.

Extirpation of the Uterus.—DR. WM. GARDNER exhibited a uterus removed by the vaginal method for cancer, and related

the case. A lady of 57 had consulted him a few months ago for continuous, slightly reddish, watery vaginal discharges, pain in the sacral region, and general debility. On examination, the uterus was considerably enlarged, measuring 4 inches in the depth of its cavity, retroverted, and quite moveable. The cervix, which was quite healthy, was dilated with a tent, and a quantity of friable outgrowth in the cavity detected and removed. No improvement in the symptoms resulted. A few weeks later total extirpation was advised, and performed a few days ago. The operation presented nothing unusual, except that after it was completed an embryonic dermoid cyst of the size of a small orange presented in the wound, and was removed. The patient made an excellent and speedy recovery. The specimen showed that the disease was strictly confined to the interior of the uterus. The case was therefore a typical one for the operation of total extirpation. Dr. Johnston, Lecturer on Pathology in McGill University, had made a microscopical examination, and pronounced the disease to be carcinoma, less favorable for non-recurrence than sarcoma, which it was hoped it might be.

Dr. Johnston thought, from its appearance, the cyst must have arisen from inclusion of a portion of the amnion in early fœtal life.

Dr. Hingston thought it was probably a piece of included fœtal membrane.

Ovariotomy during Pregnancy.—Dr. Wm. Gardner made a brief communication about a case related to the Society, with exhibition of the specimen, some three months ago. The case in question was one of ovariotomy performed on a patient suffering from symptoms of peritonitis. The tumor was a dermoid cyst, universally adherent, with twisted pedicle; washing out and drainage were resorted to, the drainage-tube remaining in the Douglas pouch and resting against the posterior wall of the uterus for five days. The patient made an easy and rapid recovery. At the operation the uterus was suspiciously bulky, softened, and vascular. The possibility of pregnancy certainly occurred to the operator, but was not seriously entertained. However, a few days ago he had an opportunity of examining the woman, and found her certainly pregnant about five months. In some particulars he thought the case unique, and well worthy to be placed on record. Ovariotomy during pregnancy without interruption of gestation has been performed a good many times; but uninterrupted gestation in spite of ovarian tumor with twisted pedicle and consequent severe peritonitis, and a complicated

ovariotomy with separation of adhesions, copious washing out and drainage-tube for five days, if not unparalleled, must be exceedingly rare.*

DR. HINGSTON thought it should not be an invariable rule.

DR. GARDNER thought that those operating largely were agreed that the danger of such operation was less than the danger from the tumor if left till full term. His course would depend from the date of pregnancy.

Fibro-cystic Tumor of the Testicle.—DR. RODDICK reported a case of fibro-cystic tumor of the testicle, and made some general remarks upon the subject of tumors of the testicle. He said: The specimen I show you is a diseased testicle removed a few weeks since. The patient, a healthy-looking young man of 24 years, was brought to me from one of the neighbouring States, having a history of a slow enlargement of the testicle, the duration extending over at least ten years. Thus the patient being only 24, there is no likelihood of its being syphilitic. So far as he remembered, the testicle was never injured. He had gonorrhœa some four years ago, and is now suffering from stricture. No history of inflammation of the epididymis or testicle during the presence of the gonorrhœa. On examination, the left testicle was found to be the size of the closed fist, very heavy, and generally firm to the feel. In one place in the front was a distinct spot of fluctuation, which led one surgeon to suspect hydrocele and to tap, removing about a drachm of blood-stained serum. The bulk of the mass, however, was very firm and fibrous in the feel. The cord is quite free and normal to the feel. The diagnosis was fibro-cystic disease. I advised removal. In the operation, at the first incision, the hydrocele fluid escaped. The usual mode of operating was modified; instead of ligaturing the whole cord, the vessels were tied separately. Thorough drainage was provided, and dry dressing of borated cotton and naphthol used. The patient was sent home in ten days. Dr. Johnston has given me the following pathological report:

"The specimens were somewhat gelatinous-looking, and not vascular. On microscopic examination, the main part of tumor consists of epithelial elements which do not appear to be growing, are gelatinous-looking, and are obviously seminal tubes, whose epithelial cells are degenerated on account of (?) the growth of a large amount of fibrous connective tissue which has in places undergone a similar degeneration to that of the epithelium, and the amount of which varies in different places. Without know-

*The patient is now (Sept. 6) daily expecting her confinement, and, except for complaint of pain in the loins, is in perfect health.

ing the history of the case, I thought from the specimen that it was a tumor growing out of an old orchitis. Should call it quite quite benign, with the single reservation that tumors arising out of inflammatory products have a tendency to recur. At all events, it has none of the distinctive microscopical appearances of a malignant growth. (Of course this statement only refers to the bits given me to examine, but I supposed the rest was of the same nature.)"

The name which I gave to this tumor, fibro-cystic disease, is, in my opinion, a good one for clinical purposes, although I am aware it is seldom employed now-a-days by pathologists. We have the pure fibroma (often an atrophied condition) and the cystoma described, but in my experience we get the fibrous element predominating to such an extent in some cases that we are justified in retaining the old name. I think that the greater the cystic formation, the more likely is the tumor to have malignant tendencies, and fibro-cystic tumors doubtless often degenerate in this way. Will this tumor? Dr. Johnston thinks it may. Unfortunately, the condition of the cord, while of some service in making a prognosis, is not always reliable.

Dr. Roddick then exhibited photographs of the patient before and after the operation.

DR. FENWICK spoke of the difficulty in prognosis after removal of such tumors. Even with the microscope it was not always possible to say whether it would return in the stump. He agreed with Dr. Roddick, except that he thought the two classes of tumors he described could look as like as two peas, and cited cases to prove it.

DR. HINGSTON urged the propriety of always giving a favorable prognosis in all cases of tumor of testicle where cord was not involved. As to detail in the operation, he thought Dr. Roddick's special procedure was the general rule. It was not necessary to attach the cord to the skin.

DR. RODDICK, in reply, stated that he had formed his opinion after referring to at least five leading authors, including Bryant. Had himself seen Bryant ligature *en masse*.

Sayre's Hammock.—DR. RODDICK also gave a demonstration of a modification of Sayre's hammock to avoid the danger of the jacket in applying plaster-of-paris jacket.

CANADA

Medical and Surgical Journal.

MONTREAL, OCTOBER, 1887.

THE SEXES IN CONTROVERSY.

A few months ago an article on "Brain-Forcing in Childhood," from the pen of Dr. Wm. Hammond of New York, appeared in the columns of the *Popular Science Monthly*. With the conclusions of this paper we think most physicians who have mingled with the duties of their ordinary practice any thought upon the educational tendencies of the times will in the main agree. However, Dr. Hammond having made some allusions to the brain differences of men and women, a redoubtable champion of woman's imaginary wrongs—in this instance the injustice done her by the writer of the article in question—has arisen in the person of Miss Helen Gardener. This lady, not content with having administered one dose of reproof and correction to Dr. Hammond in the columns of *Popular Science*, (to which the doctor replied in a moderate tone), has followed it by a second. It is generally believed that the gentleman she has so vigorously attacked knows something about the structure, functions and diseases of the nervous system. Miss Gardener admits, somewhat ungracefully, that she is not herself an authority on such subjects; but she wields as her weapons the statements of others,—rather, we should say, flings them at her male antagonist in forked-lightning style. She evidently intends that Dr. Hammond shall bite the dust, and having him down, well scourged, raw and bleeding, with abundance of salt and pepper rubbed in, to leave him a warning to others who may venture to question the structural equality of woman's brain or any other part of her. And then she tells him and us that we have not heard the last of this yet. O! ye gods!!

We do not know who Miss Helen Gardener is; but we sincerely hope she is not a type of the coming woman. Unquestionably the higher education of women is one of the greatest problems of this age. But, unless we are much mistaken, there are breakers ahead; and there may be some results fraught with evil as well as others equally abounding in good that we as yet scarcely dream of in this connection. Once bring men and women into keen competition for bread, for place, for honors, for power, and you break down the barriers Nature has set up, and tend to destroy those differences which she has taken æons to form. If men and women engage in public intellectual slugging matches the results are not difficult to foresee. There are now enough men, roused to the importance of giving the opposite sex every advantage necessary for free and full development, to plead woman's cause and see that she gets justice in the world, without women themselves putting on armour and entering the arena of public strife. All men of sense and sensibility must feel pained at such displays of rancour, pettiness and a host of other ill-definable, but very real and undesirable, qualities as that shown by the lady combatant in this case. We do not care to say who is in the right as to the scientific facts; nor do we hold up Dr. Hammond as a model controversialist. Our object is to point out that such exhibitions as these greatly injure the cause of woman and the cause of humanity.

By an odd coincidence there is in *Popular Science*, on the very next page to the concluding one of Miss Gardener's effusion, an editorial article on "Culture and Character," which breathes a very different spirit, and which we could wish to see taken to heart by every educational institution on this continent. We reproduce a portion of this article, regretting that we have not space for the whole:

"In this country we are laboring with great zeal and vast pecuniary resources to promote the cause of culture. We educate, educate, educate, as somebody once said we ought to do; but whether the result is to produce much that can be called culture in any high sense is an open question. A criterion may, perhaps, be found in a comparison of the rising with the now

adult generation. Are our young people showing graces of mind and character in more abundant measure than their parents? Are their aims higher? Is their language better? Are their intellectual occupations more serious? Are their manners gentler and more refined? We do not propose to answer these questions dogmatically; but this we say, that, unless there has been an improvement in these several respects, a vast amount of educational effort has not met its full reward. Speaking broadly, it seems to us that the culture of our educated classes, or of the classes supposed to be educated, leaves much to be desired, and we are disposed to think that one reason of this is that we have conceived of education in too purely an intellectual sense. We have thought more of sharpening the thinking faculties than of liberalizing the sentiments or softening the manners. We have introduced too much of rivalry into education, and represented education too much as a preparation for further rivalry in after-life. We have imparted knowledge, but have only to a very moderate extent succeeded in inculcating wisdom; and knowledge without wisdom seems poor, thin, and sometimes even meaningless. We need, as it seems to us, to devote more consideration than we have hitherto done to the question, What is the true ideal of human life?"

DONATION TO McGILL UNIVERSITY.

The Medical Faculty of McGill University has just received a valuable addition to its endowment fund from a member of its teaching staff. Dr. Cameron, Professor of Midwifery, has made over to the Faculty's Museum an extensive collection of plates, casts, models, instruments and anatomical preparations, intended to illustrate the branch in which he is interested. It is his intention to add yearly to the collection other objects which will keep it up to the most modern improvements. When complete, its value will be about $5,000. The Faculty has further received from Prof. Cameron a donation of $5,000, the interest of which will be annually expended in promoting in various ways the efficiency of the teaching in the same department. The University is to be congratulated upon the handsome gift and also upon this additional evidence of the keen interest taken in its welfare by its graduates and teachers.

THE INTERNATIONAL MEDICAL CONGRESS.

The first American meeting of the International Medical Congress, recently held in Washington, was, on the whole, a fairly successful gathering. Although the attendance was much less than at the great London meeting, it has fully equalled any of the other meetings of this body. The number of foreigners present was not at all equal to that of previous meetings of this international body, and was far less from what it was confidently expected to be, and, with the exception of a very few, there were no distinguished outsiders present. The most disappointing matter connected with the Congress, however, was the absence of the vast majority of those Americans who have made American medicine and surgery respected at home and abroad.

At present it is difficult to estimate the scientific value of the meeting. This cannot be done until the proceedings are published. This is promised before the beginning of the new year.

Dr. N. S. Davis of Chicago, the worthy president of the Congress, filled his position with ability and dignity.

The general addresses were in many respects of a high order. That of Dr. Austin Flint's on "Fever" was an able exposition of this subject, especially from the physiological side.

Prof. Semmola of Naples delivered a very thoughtful address on Bacteriology, which was listened to with marked attention.

The address of Dr. Unna of Hamburg on "The Relation between Dermatology and General Medicine was an able review of the importance of his special subject. The address is one which will well repay a careful study.

Out of the vast number of papers read, there are many no doubt of great and abiding interest, and which will prove that the ninth International Medical Congress was not held in vain.

CANADIAN MEDICAL ASSOCIATION.

We devote the greater part of our present number to a record of the proceedings of the late meeting of the Canadian Medical Association at Hamilton. The attendance was fully up to the average, but it was far short of what it might have been and of what

it should have been. Taking into consideration that in Canada there are fully four thousand practitioners, it does not speak well for them as a body to have no more than a representation of three per cent. present at a meeting purely intended for their benefit. The character and number of the papers read were fully equal to those of any previous meeting.

Dr. Graham, in his excellent address, touched on many points of deep interest to the profession. We sincerely hope that his words in reference to the importance of maintaining the Association in a high state of efficiency will be read and pondered by all medical men who have the cause of the status and honor of their profession in this country at heart.

The general addresses were a new and successful feature of the recent meeting.

It must have been apparent to all present at the Hamilton meeting that the traditional two days is too short a time to thoroughly discuss the papers promised. We hope next year to see the time extended to three full days.

The presence of Dr. Granville Bantock of London, of Dr. McGraw of Detroit, and of Dr. Osler of Philadelphia, added much to the success of the meeting.

PROVINCIAL MEDICAL BOARD.

The semi-annual meeting of the Provincial Medical Board was held at Quebec on the 28th September. A complete account of the proceedings will be given in our next issue. The chief matter of importance was the report from the committee charged with drafting amendments to the present Medical Act. A majority of the committee favored the establishment of a Central Examining Board, but a minority report from the representatives of the Protestant Universities expressed their disapproval of the contemplated change, and maintained the inalienable right of the Universities under their charter to qualify for registration. The same report also raised objections to the proposed alterations in the preliminary examination. The Board adopted by a large majority the draft presented by the committee, after making some amendments.

NOTES AND COMMENTS.

The re-establishment of the Faculty of Medicine of the University of Toronto is an event of importance in the history of the profession in Ontario. The original faculty was organized in 1843, and after an existence of ten years was abolished by an act of the Legislature. The new faculty is practically the Toronto School of Medicine with certain additions. It is interesting to note that it was the bitter opposition offered by the professors of the old faculty to the organization, by Dr. Rolph, of the Toronto School as an independent teaching body, which led to the failure of this early and most ambitious attempt to establish a government medical school. When the opportunity came, Dr. Rolph did not forget his opponents, and his powerful influence was sufficient to secure the abolition of the faculty. The principal changes are as follows: In Surgery, Dr. MacFarlane and Dr. I. H. Cameron are associated with Dr. W. T. Aikens, and will conduct the clinical work at the hospital. In Medicine, Drs. H. H. Wright and Graham have Dr. George Wright as Associate Lecturer on Clinical Medicine. Dr. U. Ogden has the chair of Gynæcology, and Dr. Adam Wright takes Obstetrics. Dr. Burnham has been associated with Dr. Reeve as Clinical Lecturer on Ophthalmology and Otology. Dr. McDonagh is Instructor in Laryngology, and Dr. Caven Demonstrator of Pathological Histology. The scientific branches will now be taught at the University: Physiology and Histology by Professor Ramsay Wright, Dr. A. B. Macallum, and Dr. D. McKenzie; Chemistry by Professors Pike and Ellis; and Physics by Professor Loudon and W. J. Loudon. This constitutes in reality the most important change which has been made, and adds greatly to the strength of the faculty. The new arrangement is certainly for the benefit of medical education in Ontario. Regrets have been expressed that a union of the two Toronto schools could not have been effected, either with the hospital or the university as the centre, but the Trinity school preferred to remain independent. There are students enough for both, and the stimulus of competition is always healthy.

The late John Flint South, well known to senior surgeons, devoted the evening of his life to collecting materials for a history of the rise and progress of surgery in England, but night came before he had completed his labor of love. The papers have been edited by Mr. D'Arcy Power of St. Bartholomew's Hospital, under the title "*Memorials of the Craft of Surgery in England*"; and Sir James Paget, to whom they were first

entrusted by the Council of the College of Surgeons, has written an introduction. From frontispiece to index the work is of rare interest—the story of the growth and evolution of the surgical craft from the days of the Saxon Leeches to the incorporation of the present Royal College of Surgeons. The records correct a very prevalent error that the surgeons were directly descended from the barbers. It is clearly shown that as early as 1368 the surgeons had formed a separate guild, and in 1540, when they joined with the barbers practising surgery and the Barbers and Surgeons' Company was incorporated, the union was only, as Sir James Paget says, "an official junction," and the Company had two sections, which remained distinct until the formation of the Surgeons' Company in 1745. The chief portion of the volume is taken up with the internal history of these companies, and long appendices give the various ordinances, regulations and charters. An exceedingly interesting account of John of Arderne throws light upon the state of the profession in the fourteenth century. He was a specialist in the treatment of fistulæ, and seems to have been remarkably successful. A long extract is given from his "*Of ye manere of ye Leche*," which shows him to have been a wise and observant practitioner, very careful of the reputation of his brethren. When asked of another "leche," he warns against detraction, "he that skorneth other men shall not go away unskorned," and advises that "he curteysly answere" "I have naught heard of him but good and honest." The fees which he charged seem exorbitant, when we consider that money at that time was at least twelve times more valuable than at present. For a cure of *fistula in ano* he asked forty pounds, with robes and an annuity for life of one hundred shillings!

A *vade mecum* of visceral surgery in verse, by Dr. Risorius Santorini, under the title "*Macte Lister Triumphator!*" may be warmly commended as an exceedingly safe guide. Our German colleagues excel in this sort of thing, and good commonsense advice on questions of operative interference in visceral affections may probably catch the student's ear in metre better than in prose. Here is an illustration of the way in which he refers to Hueter's case of *cure* of bronchiectasy by incision, which turned out to be tuberculosis:

Er (Mosler) hat mit Hueter schon vor Jahren
In Griefswald einen wunderbaren
Schulfall von Bronchiektasie
Kuriert per Lungenchirurgie.
Kuriert? Nun ja! wie kannst du fragen
Es trat ja *erst* nach hundert Tagen

Der exitus lethalis ein!
Und das soll *noch* nicht Heilung sein?
In Obductionsberichte fand
(Der Fall war höchst interessant)
Lakonisch sich als Diagnose
"Gestorben an———Tuberculose!"

In secondary gangrene and in bronchiectasy, incision is alone permissable *à la Fenger*. Of Cayley's suggestion to induce pneumothorax in cases of profuse hæmoptysis, the advice is "Halt dich von solchem Humbug frei." On cardiac surgery, as practised by Westbrook and recommended by J. B. Roberts, his strictures are severe:

Mich, Freund, sollt's *gar nichts* Wunder nehmen.
Wenn sie—nach *solchen* Yankeestücken
Die "Wissenschaft" demnächst beglücken
Mit Vorhofsresection nicht nur,
Auch mit Aortaligatur!

The little work is, indeed, a "feuchtfrölich-antiseptisches vade mecum," very well adapted "fur den strebsamen modernen Arzt."

Ex pede Herculem! Three doctors' cards—genuine. Such was the inscription which I saw on an envelope the other day in a doctor's office. The cards were—(1) *Dr. A. S. Brown*, size 3 by 1½ inches; (2) *Dr. S. S. Smith*, 800 Commonwealth Ave., New York, size 4 by 2; (3) *Dr. Seth Jones*, 50 Eagle street, Rochester, size about 5 by 3, with gilt and indented edges. At the top, several specialties indicated; below, office hours and telephone number.

Professional custom in cards, as in door-plates, varies in different regions. The English physician has usually his name alone, sometimes the address of house or club. The cards of continental and American physicians are usually larger, more boldly printed, and on the former we very commonly see the titles or the official positions. Such a card as No. 3 stamps the man as on the borderland, or already in the wastes, of quackery. I allude to the subject because last year I saw the card of a recent graduate which was nearly as large and *loud*. I was interested enough in his welfare to refer to it, and he assured me that he had erred in ignorance. I believe this is often the case, and it is just in these, apparently trivial, details of professional etiquette that we allow our graduates to go out without any instruction. The final students in every college should have the benefit of a short course of lectures on medical ethics and on the business and legal relations of the doctor. The plan was adopted last year at the University of Pennsylvania.

WILLIAM OSLER.

Obituary.

WILLIAM STEPHEN, M.D.—We have with much regret learnt of the death of Dr. Wm. Stephen, formerly of this city. Dr. S. was a graduate of McGill University, and a gentleman of high education and good attainments. After practising for some time in Montreal, inducements of a very promising nature were offered him to remove to the Argentine Republic. After spending a year in Vienna, he settled in Rosario, near Buenos Ayres. Here he became very popular, and was in the enjoyment of a large and lucrative practice. By some accident, when stepping upon a car, he fell, and was fatally injured. A bright and promising career has thus come prematurely to an end.

ALONZO CLARK, M.D., LL.D., died at his residence in New York after a long and painful illness, aged 80 years. Dr. Clark was for many years Professor of Pathology and Practical Medicine in the College of Physicians and Surgeons. For a long period he occupied a leading position as a consultant. He was widely known as a strenuous advocate of the use of very large doses of opium in peritonitis. This practice, however, never became popular, and at the present time it may be said to have very few supporters. Dr. Clark was an able and eloquent lecturer. He has left a name and an influence that will not readily die.

Medical Items.

—Lea Brothers & Co. of Philadelphia make the important announcement that, beginning with the year 1888, the *American Journal of the Medical Sciences* will be issued monthly. This great quarterly has been for more than half a century the leader and exponent of medical progress in America. The enterprising publishers, recognizing the spirit of the age, have determined that in future, as in the past, it will continue to occupy its worthy position.

SUCCUS ALTERANS IN RHEUMATISM AND SYPHILIS.—We are reliably informed that the preparation Succus Alterans (McDade) is becoming a very popular remedy with the profession, and being very extensively prescribed in general practice as an alterative tonic, aside from its use in syphilitic diseases. The good results from its use in treatment of rheumatism, of chronic character especially, is worthy of consideration. The remedy is certainly growing in favor, and as no great claims have ever been made for it, but simply placed upon its own merit, we think it could possess no higher recommendation.—*Indiana Med. Journal.*