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EDITORIAL.

THE RECENT SESSION OF THE MEDICAL COUNCIL.

The recent meeting of the Medical Council was an important one. Several topics of much interest to the medical profession of this province and of the whole Dominion were up for consideration.

In dealing with the case of Dr. S. B. Pollard, the work of the Medical Council was comparatively easy. He had been convicted of performing a criminal operation. His lawyer, Mr. A. A. Bond, made a plea for Dr. Pollard that the name of his client should not be struck off the register. This was not acceded to by the Medical Council, and the order was made that the doctor's name be erased.

The case of Dr. W. R. Cook was not so easily disposed of. Dr. Cook and his legal counsel, Mr. Hassard, addressed the Medical Council. During September, 1908, Dr. W. R. Cook was tried in the court by Judge Winchester and a jury. On that occasion he was acquitted. The Medical Council did not deal with this phase of the case, but decided to remove his name from the register on the ground of disgraceful conduct in a professional respect.

Those who voted for the removal of his name were: Drs. Bascom, Gibson, Griffin, Hart, Hillier, Hoare, Johnson, King, Lane, Linton, MacCallum, MacColl, Ryan, Moorhouse, Robertson, Spankie, and Starr, 17.

Those who opposed the motion were Drs. Adams, Cormack, Hardy, Jarvis, MacArthur, Merritt and Wickens, 7.

Drs. Henderson, Henry, Temple and Vardon were not in the room when the vote was taken.

Dr. T. W. Vardon, of Galt, and Dr. E. T. Adams, of Toronto, moved that the case of Dr. W. R. Cook be postponed until the next meeting of the Council in July, 1910. The order as given, however, prevailed.

The finances of the Medical Council came up for criticism. It was very freely stated by a number of the members that the finances were in an unsatisfactory condition. It is quite evident that the whole subject of expenses will have to be revised and new methods adopted.

After much discussion it was unanimously decided to approach the Legislature and ask that the Ontario Medical Act be so amended as to enable the Executive Committee of the Council to take the initiative in cases of "infamous and disgraceful conduct in a professional respect." Heretofore the Council had to send such cases to the Discipline Committee for investigation and report thereon to the next meeting of the Council. This caused much delay. The amendment now sought will enable the Executive Committee, in the interval of Council meetings, to send such cases to the Discipline Committee for investigation and report to the oncoming meeting of the Council. This will have the effect of saving much time. This was unanimously carried. This step onward we very heartily endorse and trust that the Legislature will at once confer the power asked for by the Council for its Executive Committee.

It was also agreed to ask for power to at once erase the name of any practitioner who had been convicted in court of any infamous or disgraceful conduct in a professional respect or of any illegal operations. As the Act now stands, the accused doctor must be served with a notice and has the privilege of appearing before the Committee in his own defence. This leads to delay, and might lead to a miscarriage of justice. In the case of Dr. E. M. Cook, for example, the officer of the Medical Council has not been able, so far, to locate the doctor, though the Council is anxious to bring him before it. For this reason Council cannot take action. It is proposed to overcome this defect in the Act so as to confer upon the Council the power to erase the name at once in the case of a doctor being convicted by a court trial.

The subject of Dominion Registration took up a large portion of the attention of the Council. This was only natural, as it is the most important medical topic before the profession of Canada to-day. Dr. T. G. Roddick, of Montreal, was present, and the Council extended to him the courtesy of the meeting and permitted him to address it. We all know how zealously Dr. Roddick has stood by his bill since 1902. We hope some day to be able to chronicle his complete success and say of his labors in the words of Horace, "He has built a monument more lasting than brass," because we know as Virgil said, "Of these things he has been a large part."

After careful discussion, that clause in the establishing of a central examination was finally approved of. This is a very important step onward. That there should be one common standard for all Canada, will yield splendid results.

The representation from the provinces in the Dominion Council was left as in the bill. No province can have more than three representatives and some may have only two, according to the number of practitioners

in such provinces. Each university will be entitled to one, and homœopathic physicians to three.

The clause providing for registration was left in the Act. It reads as follows:—"Any person who has received a license or certificate of registration in any province previous to the date when the council shall have been first duly constituted under this Act, and who has been engaged in the practice of medicine in any one or more provinces of Canada, shall, after six years from the date of such license or certificate, be entitled to be registered under this Act as a medical practitioner, upon payment of the fees and upon compliance with the other conditions as regulations for such cases prescribed by the Council."

British Columbia has held to the view that before any one can secure Dominion registration he must pass the examinations of the Dominion Council when formed. This contention the Ontario Medical Council allowed to stand. This may prove a serious objection to the bill becoming law. We think that the profession in British Columbia will act in the truest interests of the profession of this country to allow those now in good standing in any province to secure registration under the Dominion Council, even if a number of years should have to elapse from the date of graduation or qualifying in the various provinces. We think it would be going too far to demand that those now in practice and who have been so for many years should undergo an examination prior to Dominion registration. This is like creating a rock of offence and a stumbling block for no good purpose.

If the bill, in its amended form, becomes law, all who secure a Dominion qualification may locate in any province. This will enable them to go to British Columbia if they wish to do so. We are quite certain if all who are now in practice in the various provinces were also granted Dominion standing it would not make an iota of difference to British Columbia, as those already settled would not go to British Columbia and overcrowd it any more than would they flock to any other province and overcrowd it. In a few years all will secure Dominion registration anyway, and we contend that it may just as well be permitted to be so at once under the proposed bill and any amendments thereto.

Dr. Spankie, of Wolfe Island, and Dr. E. A. P. Hardy, of Toronto, were appointed a committee to further the ends of Dominion registration, and to continue the negotiations.

Notice of motion was given by Dr. Vardon that a Pasteur Institute be established in Toronto for the treatment of rabies.

An additional representative on the Council was accorded to New Ontario, and Nipissing, Algoma, Thunder Bay, Rainy River and Manitoulin Island shall form the new district.

The proposal to discontinue the representation from Victoria and Trinity was left over for the present.

There is no gainsaying the fact that there are some bodies represented on the Medical Council which ought not to hold seats there. Victoria University and the University of Trinity College have ceased teaching medicine. The Royal College of Physicians and Surgeons of Kingston has been absorbed by Queen's University. The University of Ottawa never had a medical college. These are represented on the Medical Council at present. We contend they have no right to such representation. The Act should be amended to close these seats. As Dr. J. S. Hart said: "There is no doubt that we have rotten boroughs represented in this Council."

THE FINANCES OF THE MEDICAL COUNCIL.

We think this subject calls for serious attention at the hands of the medical profession of this province.

On the 30th June, 1908, there was on hand, in cash, the sum of \$48,359.41. On the 1st June, 1909, there was on hand, in cash, the sum of \$44,745.17, or \$3,614.24 less than in June, 1908. During the year about \$3,000 had been expended on property that might be fairly said to go to capital account.

Dr. J. A. Temple, Chairman of the Finance Committee, in submitting the report, said that when the old building was sold there was \$55,000 in cash. Now there was only \$44,745. Therefore, \$10,255 of the capital had been spent.

During the year the income had been \$27,749.77 from all sources, and the disbursements for all purposes were \$31,363.01, or an excess of outlay over income of \$3,614.24.

It is very clear that this cannot go on long, or the Medical Council will become bankrupt. A very strenuous effort should be put forth on its part to keep the expenses within the income for the year. While the Medical Council must do its duty in the matter of holding examinations, paying its officers, and other legitimate expenses, it is quite clear that controllable expenses must be curtailed so as to avoid entrenching upon the capital of the College of Physicians and Surgeons.

OVERCROWDING IN CITIES.

This is a matter of much importance to both the health and morals of every city. It will not do to allow the European notions upon this

subject to prevail in this country. There is still plenty of land, and the people must be compelled to allow such air space for each occupant as will ensure a reasonable chance of health.

In Toronto there have been of late a number of very serious instances of overcrowding. The attention of officials have been directed to this state of affairs by those who are taking an interest in charity and philanthropic work in the city. In some small rooms the authorities discovered as many as three double and two single beds, Three people would occupy each of the former and two slept in each of the latter beds. In cases where the lodging house keepers refuse to make the changes necessary to comply with the law, informations were sworn out against them.

This should not be allowed to continue. If the law is ambiguous it should be made quite clear, and power placed in the hands of the proper authorities to put an end to the condition referred to in the foregoing example of overcrowding.

A couple of years ago the local health department took action against boarding house keepers, charged with overcrowding, but Magistrate Kingsford dismissed the charges. Under the Public Health Act, the health officer may enter and inspect a lodging house or tenement where rooms are rented if he believes that such rooms are occupied by more persons than is reasonably safe for the health of such occupants. The Act says that if "the sleeping rooms upon such premises are such that less than 400 feet of air can be provided for such adult occupant of such room or rooms, they shall be deemed to be overcrowded." When the cases came up before Magistrate Kingsford interpreted the Act to mean that the premises were not overcrowded if the total cubical contents of the house, including kitchen, etc., supplied 400 cubic feet of air for each occupant. The health department contends that there must be that much air for each occupant of the crowded rooms, and will press the charges on that ground. If the department gets a judgment, the Act allows the officers to see to the cleaning out of the premises.

With this object in view informations were sworn out against seven persons by the Local Medical Health Department. These persons were brought to trial. So far no decision has been reached.

THE RETIREMENT OF MISS SNIVELY.

The retirement of Miss Snively is an event of sufficient importance as to call for more than a passing word or thought. She has been at the nursing work of the Toronto General Hospital for twenty-five years.

When she came to the hospital twenty-five years ago, nursing was not what it is to-day; and for this change in Canada no small share is due to Miss Snively. She has proven herself a woman of action.

In Miss Snively several qualities were present that made for her success. She was a thorough disciplinarian. While she was never rude nor domineering, she gave it always to be understood that her word was law and must be obeyed. The nurses during all these years recognized in her the superior and head to whom they had to yield a loyal and faithful service.

But she was always conscientious. She did her own share of the work as a duty she owed the hospital, the patients and the training school. This unflinching devotion to duty on her part reflected itself throughout the institution. Every nurse could say "There goes my model." It was in the attempt to live up to the high ideals set by Miss Snively that has been the means of turning out from the General Hospital so many excellent nurses.

Furthermore, Miss Snively was well up in her work. She knew well what every nurse should know, and she made it the aim of her life that that knowledge should be taught every nurse in training. No effort was left undone to make her nurses efficient in every detail. This meant that she was a good teacher herself and saw to it that the nurses received proper instruction upon all subjects.

But Miss Snively will long be remembered for work among those who, like herself, held positions of trust and responsibility. For many years she took the keenest interest in the work of nurses' training schools through the Association of Lady Superintendents of Hospitals. This work brought her into contact with those of her own class; and it was here that her personality came into strong relief. In this field her influence has had a very far reaching effect.

For Miss Snively we wish many years of health and happiness.

THE INCREASE IN THE NUMBER OF SUICIDES.

It is becoming more and more a matter of observation that the number of persons who terminate life by suicide is steadily on the increase. According to the figures of Frederick L. Hoffman, the state of affairs in the matter of suicides in the United States is as follows:—

The average rate of suicide in each 100,000 population of sixty-five American cities having an aggregate population of 84,414,594 was 19.5 for the five years 1904-1908. In the preceding five years it was 17.5 per 100,000, while in the years 1894-1898 inclusive it was only 16.8, making a gain of 2.7 in ten years.

The rate per hundred thousand in 1908 was the highest known in the United States, being 21.8, against the 18.8 of 1907. This figure is a gain of more than one point over the exceptionally high rate in 1904 of 20.7. The census of 1910, correcting estimates of population for intercensal years, may show, Mr. Hoffman says, that the actual rate may be higher than the apparent rate. From every point of view, moral, social and economic, the increase in the suicide rate, he finds, is one of the most alarming and suggestive phenomena of the present day.

In New York the increase has been about the same as in the country as a whole. In 1898-1907 there were 4,710 suicides, or 20.8 per 100,000, in Manhattan and the Bronx. In 1908 there were 644 suicides, or 23.7 per 100,000. Brooklyn's increase was much smaller. In the period mentioned, there were 2,089 suicides, or 10.2 per 100,000. In 1908 the rate was 16.9, a gain of .07.

Out in San Francisco the conditions were reversed. The city shows a gain of only 5.2, while in Oakland, across the bay, the rate of increase was 32.6 a hundred thousand.

The tables of the suicide rate in the sixty-five cities show that suicides are more frequent in the larger cities than in the smaller ones. The increase is also greater in western and southern cities than in north Atlantic and north central cities.

The analysis of causes of individual cases of suicide reveals that the increase of suicidal tendency affects particularly the well-to-do, prosperous, and better educated elements of the population more than it does the unfortunate, ignorant and poor. The close connection of crime and suicide, particularly in the cases among the wealthy, is pointed out.

More grave than these cases of where men of high position chose self-inflicted death to escape punishment are the sure signs of mental and physical deterioration which have been found, especially of those who have come to the cities from the country. The opportunities in the city for excitement and temptation cause nervous diseases and material, moral and spiritual discontent.

The suicides of the wealthy and well-to-do, are of special importance to insurance companies. This class is always heavily insured, and the suicide of any one man may entail a heavy burden on a company. He suggests a special care in framing suicide clauses in policies, as it always will be a difficult thing to safeguard against suicide experience by only improving risk selection.

For this tendency towards increase in the number of those who commit suicide there are no doubt good reasons. The state of frenzied finance and the mad desire to get rich at all costs take a prominent place among the causes. A man robs a corporation and pays his creditors by taking his own life.

THE FEDERAL GOVERNMENT AND TUBERCULOSIS.

In the House of Commons, on 13th December past, Mr. George H. Perley, member for Quebec, raised the question of government aid in the efforts now being made to arrest tuberculosis. Mr. Perley made an able appeal for an increased subsidy towards this work. At present the government grant is \$5,000 a year. During his speech Mr. Perley said among other things:—

“The Government is spending hundreds of thousands of dollars to protect animals from disease. It should be willing to make a suitable grant for the protection of human beings. We are voting \$915,000 this year to bring immigrants into Canada. It would pay us to spend that money in keeping the citizens we have and in teaching them how to protect themselves from this disease.”

The position taken by Mr. Perley was ably supported by Drs. Biland, Black, Roche, Schaffner and Sproule.

Hon. Sydney Fisher, Minister of Agriculture, said that he was in keen sympathy with every effort to lessen the ravages of tuberculosis and was glad to know that the various anti-tuberculosis leagues were doing so much excellent work. He expressed the hope that the House would unanimously adopt Mr. Perley's motion. The motion was then carried.

As a result of this, no doubt there will be a considerably increased sum placed in the estimates this year to assist the Anti-tuberculosis League. The thanks of all are due to Mr. Perley. We learn that the sum of \$10,000 will be appropriated.

THE TORONTO GLOBE ON THE MEDICAL COUNCIL.

We take pleasure in giving the following editorial from the *Toronto Globe* of 10th December last:—

“It is creditable to the Medical Council, respectful to the profession, and satisfactory to the public that the wiser counsellors prevailed at yesterday's meeting. It was necessary that men who had thought themselves through the problem should insist on the issue being made so plain that no intelligent layman would be misled. This was done yesterday. It was made plain that the courts of law have jurisdiction over criminal conduct, and that the Council of the medical profession is by the statute made responsible for judging and punishing 'infamous and disgraceful conduct in a professional respect.' With that distinction made so plain that the wayfaring man need not err therein, the

prospects now are hopeful for a purging of the profession of those who have disgraced it, and have done so for years with impunity, because of the slackness of the Medical Council.

"It ought to be remembered by the Council, and insisted on by all physicians, that the special privileges of the profession are allowed by law and custom, and the exceptional prerogatives of the Medical Council are conferred by statute, wholly and solely for the sake of the public, and not at all for the private advantage of the medical profession. The only way to preserve those privileges is to prove worthy of them. The only way to retain for the profession prerogatives of the Council is to exercise them judicially, impartially, and in the highest interests of public morals. Otherwise the Legislature will be moved to revoke the disciplinary powers conferred by the Medical Act.

"In the past the Council strained at gnats, and removed names from the register for reasons insignificant to the public. Yesterday the Council refused to swallow a camel, and by that refusal the medical profession to-day is relieved from intelligent and deliberate public condemnation."

There are several very positive assertions in the foregoing. The first is that the Medical Council should act in all cases of "infamous and disgraceful conduct in a professional respect." When the Council in future tries to purge the profession of vile advertisers as well as of those who do illegal operations, we should expect the support of the *Globe*.

The next assertion is that the powers of the Medical Council are conferred upon it for the protection of the public. Taking this view of the case it will be the duty of the *Globe* to support the Council when it attempts to secure from the Legislature two very important amendments to the Medical Act, namely, to enable the Executive Committee to act when the Council is not in session, and to enable the officers to erase at once the name of any member convicted of a felony.

A third assertion is that the Council "removed names from the register for reasons insignificant to the public." This no doubt refers to the attempts of the Council to deal with such members as resorted to advertising in such a manner as the Council regarded as "infamous and disgraceful in a professional respect."

We do not think that it is "straining at gnats" to erase the name of a doctor from the register when he begins advertising specific cures for certain diseases, and keeps the composition of his so-called cure to himself. This is such a violation of the spirit of the medical profession as to be justly regraded as "infamous and disgraceful in a professional respect."

If the Council ever disciplines any of its members, and if this be not sufficient, disqualifies them for advertising in a disgraceful and infamous manner, we shall look for the support of the *Toronto Globe*. There is no more objectionable vampire in the medical profession than the fraudulent, designing advertiser, who attempts to make gain for himself by misleading the public as to the pretended merits of some *remedy* which he wishes to vend. When a doctor advertises a secret remedy as a cure for any disease, and does not disclose the composition of his remedy, we think he is guilty of "infamous and disgraceful conduct in a professional respect."

If one may do this, then two may, and if two, all may. Just think of the effect on the public if every doctor in Ontario took to the public press as an advertiser of some vaunted remedy! This is the *reductio ad absurdum* of letting one go undisciplined.

THE DOMINION MEDICAL BILL.

In another part of this issue we publish the Bill No. 11, "An Act to provide for the establishment of a Medical Council in Canada." This Bill is popularly known as the Roddick Bill.

As many may not have access to the Act as passed by the House of Commons and amended by the Senate, we give the text of the Bill in full. The matter is attracting much attention just now, and this is the time when every one should make himself familiar with the Bill, so as to intelligently offer needed amendments. Study the Bill carefully.

THE PROPOSED OPTICIANS' BILL.

In our issue for December, we called attention to a movement that is on foot to secure legislation incorporating the Society of Opticians. We think that the various medical societies should take this matter up and be prepared to deal with the subject intelligently.

ORIGINAL CONTRIBUTIONS.

THE INDICATIONS FOR, AND SURGICAL TREATMENT OF
GASTRO-DUODENAL ULCERS.*

By INGERSOLL OLMSTED, M.B., Hamilton, Ont.

MR. CHAIRMAN and Gentlemen,—During the period of experimental surgery of the stomach and duodenum many cases of supposed ulcer were operated on unsuccessfully. Neurasthenics and cases of ptosis were made worse so that the physicians had ample ground for hesitation in referring their patients to a surgeon. Now, however, the physiology and pathology is better understood and the results obtained from surgical intervention have been very much better. The difficulties in making a diagnosis in certain cases are, however, at times very perplexing, and hysterical cases will continue to be handed over to the surgeon, but the latter will not repeat the mistake of doing a gastro-enterostomy when no organic lesion is found.

The following may be regarded as indications for operation :

- (1) Acute perforation.
- (2) When a patient with gastric ulcer becomes, on account of periodic relapses, more or less incapacitated (v. Mikulicz)¹, or in other words, where they do not respond to medical treatment after a reasonable time.
- (3) Undoubted pyloric stenosis.
- (4) Small and oft repeated hemorrhages or repeated large hemorrhages from gastric or duodenal ulcer.

Large hemorrhages from the stomach as a rule do not call for an operation, but each case should be considered carefully as there are many exceptions to this rule.

In meeting these various indications, there is no rule that will apply to all cases. When an acute perforation occurs, an operation should be performed immediately if the patient's condition justifies it. In cases of marked shock, stimulants may be given, hot bottles applied to the body and normal saline administered subcutaneously or intravenously, until the so-called "initial shock" has passed. The contents of the stomach and duodenum are comparatively free from bacteria, hence if the abdomen be opened shortly after the perforation has taken place, the rent repaired and escaped contents wiped out, the abdomen may be closed without drainage. Deaver² believes that a gastro-enterostomy should also be done, but Mayo states that 92 per cent. of the cases will require no further operation. If the perforation is in the floor of a large indu-

* Read before the Academy of Medicine, Toronto, October 5th, 1909.

rated ulcer, the latter should be excised, and if the resulting deformity has a tendency to narrow the outlet of the stomach, a posterior gastro-enterostomy should be done. When the patient is very low and it is difficult to close the rent, the latter may be blocked with a gauze tampon, or if the opening be very large it may be stitched to the abdominal wound and a rubber tube passed into the stomach, then through the pylorus into the duodenum, for the purpose of administering food (Hochenegg).

If the perforation be in the duodenum, and Codman¹ believes that the perforating duodenal ulcer is very much more common than usually supposed, the ulcer is infolded, reinforced by omentum if necessary, and a gastro-enterostomy made. The duodenal ulcers have little or no tendency to give origin to cancer unless they extend up to and involve the pylorus (Mayo), consequently they should only exceptionally be excised. As about half of the duodenal ulcers give rise to large hemorrhages, it is wise to ligate any large vessel going to an ulcer before the latter is infolded. If drainage is deemed advisable, a suprapubic opening may be made and split rubber, or glass tube placed down into the pelvis, or in the case of a female, a T tube passed in Douglas' pouch through the vagina. If a gauze wick seems necessary in the upper wound, care should be taken that it does not come in contact with the sutures, lest damage be done to them in its removal. Flushing of the abdomen is rarely indicated. The extent of the operation depends upon the condition of the patient and the skill of the operator. Seventy or eighty per cent. should recover when operated on early.

During the last few years the frequency with which a cancer had been found engrafted on the edge of an old ulcer of the stomach, first pointed out by Cruveilhier⁴, in 1839, has led surgeons to treat the latter condition much more radically. Mayo⁵ states that from 14 to 72 per cent. of their cases of gastric cancer have a preceding history of ulcer. Many of their early cases show the cancer beginning on the margin of an ulcer. Korte⁶, Moynihan⁷, and others have reported cases of gastric ulcer treated by a gastro-enterostomy which two or three years later died of gastric cancer. Rutherford Morrison⁸, on the other hand, states that he has never seen a cancer engrafted on an old gastric ulcer and McCrae told me that it is seldom found at the Johns Hopkins Hospital.

If cancer of the stomach is to be prevented in many cases, a radical treatment of ulcers must be adopted. Our duty, then, is to excise all indurated ulcers when this is feasible. Where there is much inflammatory thickening with tumor formation, the better plan would be to do a gastro-enterostomy, and later, when the inflammation has subsided, which it almost invariably will do, excise the ulcer. Unfortunately, few patients will return for the second operation and thus it behoves the surgeon to do the best he can the first time, lest there be no second one. Moynihan⁹,

in commenting on a case of his which had died subsequently of cancer, states that perhaps it would have been wiser to have done a Rodman operation instead of a simple gastro-enterostomy.

Among those who favor excision may be mentioned Ruydigier¹⁰, Riedel¹¹, Noetzel¹², Payr¹³, Robson¹⁴, Moynihan¹⁵, Mayo¹⁶, Rodman¹⁷, and Munro¹⁸.

Nine tenths of gastric ulcers are situated in the so-called ulcer-bearing area, namely, the lesser curvature and antrum. The canal of Jönnesco or the three-fourths of an inch of the stomach to the proximal side of the pylorus, is but seldom involved.

Ulcers situated in the cardiac end of the stomach, should be excised. Like treatment may be employed in cases of tumor formation or callous ulcers. If there is narrowing of the outlet after the excision, a gastro-enterostomy should be made. Extensive ulcers of the lesser curvature may be treated by circular resection of the stomach, pylorotomy, or simple gastro-enterostomy. Many of these cases involve the pancreas and it may be inadvisable or impossible to remove them, and one must be satisfied with a palliative procedure.

When an hour-glass stomach is found the ideal method of treatment is a circular resection. Veyrassat¹⁹ sums up the treatment as follows: "That which must guide the surgeon in the choice of his operation will be whether the stomach is movable and free, or adherent and fixed. A stomach that is fixed, contra-indicates a medio-gastric annular resection, but rather a gastro-enterostomy on the anterior or posterior wall, choosing the one which allows the better anastomosis being made. The supple, moveable stomachs indicate annular resection, with this reservation, always, that the life of the patient is not unnecessarily endangered."

"As to gastro-gastrotomy, the only indication for this procedure is a fixed stomach with small cardiac pouch. The operation of Clément, or Munprofit, in which a modified Y operation is done in such a way as to tap both pouches, is too long and too complicated for general use. They have but one indication, namely, a larger pyloric than cardiac pouch with marked stenosis of the pylorus."

"Gastro-enterostomy will be the one most frequently employed. It has the greatest number of advantages, being simple and quickly done, and is the only one justified in feeble subjects with a diminished power of resistance."

A plastic operation will at times effectually remedy the deformity, though occasionally subsequent contraction of the scar will require further intervention, as in a case reported by Downes²⁰.

If the pylorus is contracted from the scar tissue of an old healed ulcer, Kocher's gastro-duodenostomy, Finney's pyloroplasty or a gastro-

enterostomy will give equally good results. It may be mentioned, however, that Finney's operation has not given as good results in the hands of Rutherford Morrison and Moynihan as has gastro-enterostomy. Where the pylorus is very much contracted almost any form of anastomosis will suffice. On the other hand, a gastro-enterostomy will often be followed by disagreeable symptoms which the Y operation of Roux, or Doyen, will not obviate. Morrison considers the occlusion of the pylorus of valve, and Jonnesco²¹ and Delagènière²² concur in this view. Mayo, however, considers it a risky procedure.

Occasionally patients with a distinct history of ulcer come for operation. On exposing the stomach, no lesion can be found. Mayo believes that if the gall bladder and appendix are normal the abdomen should be closed. Rovsing²³, in an article entitled *Gastro-duodenoskopie und Diaphanoskopie*, describes a gastroscope similar to a large cystoscope, which he inserts into the stomach through a small opening in the anterior wall, distends the organ with air and then examines the viscus both by transillumination and direct inspection. He has been able to demonstrate ulcers, cancers, small points of hemorrhage of the stomach, and also ulcers of the duodenum. Rutherford Morrison speaks well of the instrument. In doubtful cases it may prove of great value in clearing up the diagnosis. About a year ago Souttar and Thompson²⁴ described a gastroscope on the principle of the cystoscope which they pass into the stomach through the œsophagus. In a recent article they speak enthusiastically of the instrument. After distending the stomach with air, they have been able to see almost every part of the mucous membrane. Ulcers and cancers have been identified by means of this instrument and verified at the operation.

In repeated hemorrhages, large or small, where an operation is considered advisable, and where the gastroscope is not available, it may be necessary to open the stomach, inspect the mucous membrane directly, secure the bleeding point and then close it. In a case of this kind operated on for Dr. H. S. Griffin, I found two bleeding points on the posterior wall below the œsophageal opening. They were stitched with catgut and the stomach closed without a gastro-enterostomy. The patient recovered and has had good health since. It appears to me that this method is preferable to a gastro-enterostomy.

The operation of gastro-enterostomy may be done in many ways, yet the one which has given the most universal satisfaction, is the no-loop posterior method, with the jejunum running in its normal direction to the left, divided by Dr. W. J. Mayo. Clamps are used, and the opening in the stomach about $2\frac{1}{2}$ inches in length, is made at the most dependent part, downwards and to the left. Three rows of sutures are used in closing the posterior half of the wound, and two rows for the anterior

half. The outer suture is of linen, and the others of catgut. Dr. Mayo states that the reason for using three rows on the posterior half of the opening is to ensure hemostasis. Dr. C. H. Mayo employs only two rows of sutures, an outer sero-muscular Cushing suture of linen, and an inner catgut suture penetrates all of the layers. On the posterior half of the opening he makes a lock stitch with catgut, and then inverts the edge of the anterior half of the opening with his special stitch, which goes from the serous to the mucous coat, and then back through the mucous to the serous coat, first of the stomach and then of the duodenum, or vice versa. The suture is really a modified Cushing, differing in that it penetrates all of the coats instead of the two outer ones as in the case with the Cushing suture.

In making the anastomosis, care is taken to bring the bowel nicely in contact with the stomach. It should not be rotated on its axis, nor should it kink at the duodeno-jejunal angle. When passing the sutures, care should be exercised in passing the needle through the jejunal coats near the edge of the wound, else the bowel will be flattened against the stomach, thereby impairing the function of the bowel. When the opening is made in the stomach, it may be necessary to trim off some of the mucous membrane when it pouts through the wound. Moynihan²⁵ advises trimming the mucosa of the jejunum also. Some authors lay great stress on the accurate apposition of the mucous membrane as they believe that if this be done carelessly, scar tissue will form and contract the anastomotic opening. The rent in the meso-colon should be stitched around the anastomosis by a few interrupted sutures, thereby preventing the formation of hernia.

In marked contrast with this operation is the one employed by Riedel²⁶, who makes a posterior anastomosis but takes the jejunum at a point 80 cm. from its origin. The opening in the stomach is made 12 cm. in length, and an entero-enterostomy of similar dimensions is made between the two limbs of the loop.

In an analysis of the stomach contents of 45 of Kocher's cases Gilli²⁷ found the HCl diminished as a rule after the operation. In half of the cases which showed a normal acidity before the operation, no change was found afterwards, and in the other half the acidity was diminished or absent. In all of the cases the motility of the stomach was markedly increased. This has been the experience of most observers, though Deaver²⁸ seems to think that the operation practically always causes the gastric juice to become abnormal.

After operation, the patient should be placed in bed with the shoulders and chest elevated. Normal saline solution may be given by the bowel for the first 24 or 36 hours. Fluids may be given by the mouth on the

second or third day, and gradually increased. Careful regulation of diet is necessary for some weeks after an operation.

Of the complications following gastro-enterostomy, hemorrhage, perforation of the ulcer, vicious circle, and perforating jejunal ulcer are the most serious. Hemorrhage will not occur when the ulcer has been excised and due regard has been taken to control the vessels. Busch reported a case of Körtés which died from hemorrhage from the ulcer after a gastro-enterostomy. Cases of perforation of the ulcer with death following gastro-enterostomy have been reported by Busch, Clairmont²⁹, and Shoemaker³⁰. A vicious circle is now practically never seen with the modern operation. With a perforating jejunal ulcer, immediate operation is required. Paterson³¹, in a careful analysis of the reported cases, states that it has not occurred in the posterior no-loop operation. In two cases recently reported by Lion et Morceau³², the method of anastomosis is not mentioned in one case, and the Y operation of Roux was done in the other.

The ultimate results in the surgical treatment have been very good. Mayo estimates his cures in 90 to 95 per cent., and Moynihan at about 75 per cent.

The mortality had steadily diminished. Mayo reports that in their last 300 cases it has been less than 1 per cent.

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TUBERCULOSIS OF THE HIP JOINT.*

By W. E. GALLIE, M.B., Demonstrator in Clinical Surgery, Univ. of Toronto.

THE specimen which I am presenting is one of tuberculosis of the hip joint. It is of particular interest, because it is, I believe, the only fresh specimen in the Pathological Museum of the University of Toronto; and because it illustrates beautifully many of the phases of the destructive and defensive processes accompanying the disease.

The case was that of a boy of ten, who had been under treatment for hip disease for about six months. The patient's general health rapidly failed, the local symptoms increased in acuteness, abscess developed, and he died of tuberculous meningitis just one year after the appearance of the first symptoms.

In describing the pathology of a tuberculous joint, one must regulate his remarks according to the anatomy of the part. We have, therefore, to deal with the bones, the cartilages, the synovial membrane, the ligaments and the surrounding tissues.

When the disease commences in the bone, the region adjacent to an epiphyseal cartilage is the usual resting place of the bacillus. This is explained by the theory that this particular region, being engaged in rapid proliferation, is comparatively low in resisting power to micro-organisms. Another suggestion is that owing to the large blood supply to this locality and to the disposition of the blood in the sinuses instead of small tubules, the bacilli are more liable to be deposited here than elsewhere. At any rate, the organisms seem to have a strong preference for

* Read before the Academy of Medicine.

the cancellous bone tissue of the epiphyseal region between the age of three and fourteen years.

The subsequent history you are familiar with, and it is very well illustrated in the gross in the specimen. The bacillus being deposited, immediately sets up an inflammatory reaction; epithelioid cells gather about, giant cells develop, leucocytes close in on the outside, and a tubercle is formed. The constant irritation of the bacilli results in the formation of granulation tissue; the osseous trabeculæ at first, atrophy, and later disappear, thus allowing neighboring foci to coalesce, and we have established what is commonly known as a "rarifying osteitis." When attacked with a curette, this tissue is much softer than normal, as is seen by reference to this specimen. You will notice that a probe can with ease be passed into the head of the femur, indicating a marked softening of the normal structure. The centres of the foci finally undergo fatty degeneration and necrosis, and the whole area of cancellous bone is converted into a pulpy mass of granulation tissue and caseous debris.

The effect of all this inflammation in the region of the epiphyseal cartilage is very remarkable. At first, when the cartilage is simply the seat of a chronic inflammation, due to the proximity of the irritant, the result is an increased rapidity of growth: and it is an actual fact, that in knee joint disease in particular, the affected leg after the first year is from one-half to one inch longer than the other. Later on the cartilage itself may be involved in the destruction, and interference with growth and shortening from this cause result. It is not an unusual experience to find a case of knee joint disease at first show actual lengthening and later on to lose all this and finally end up with the limbs of about equal length.

Occasionally the destructive process is so rapid that the blood supply to a considerable area of bone is cut off at once. Necrosis and the formation of a sequestrum results. Such a condition is shown in the frozen section of a foot prepared by Dr. Primrose. In this case the disease was in the astragalus, and the section shows a cavity in the bone with a large sequestrum lying free within it.

At any time during the progress of the disease as described, the surface of the bone may be invaded and the articular cartilage lifted up or perforated. For a long time previous to this, changes have been noticeable in the cartilage. From a pale bluish tint, the color has become a decided pink, owing to the vascularization of the tissue from underneath. As in the case of the bone, the granulation tissue grows up and takes the place of the matrix, and, finally, perforations occur, allowing the infection to invade the joint cavity. The cartilage being then attacked from below and from the sides by the vine-like ingrowing of the granulations,

is rapidly destroyed, leaving the typical worm eaten appearance shown by the specimen. You will notice areas of cartilage still hanging on here and there, and in the recent state these looked fairly normal on the surface except for the pinkish colour. Elsewhere the carious bone is exposed, except where it is overlaid by a soft fungus sort of granulation tissue.

Following the entrance of the bacillus into the joint cavity, the synovial membrane becomes infected. Indeed, in many cases it would appear that the synovial membrane is the primary focus of the disease, and, according to Koenig, this is the case in a majority of instances. American surgeons, however, do not credit this statement, believing that they have evidence enough from post-mortem and excision work to show that, in the majority of cases, the epiphyseal cancellous tissue is the first to be affected. That destruction of cartilage and the underlying bone can result from a primary synovial infection is beyond dispute, however, as is seen in the specimen at hand. It is extremely unlikely that the disease could commence in the bone of both the femur and acetabulum at the same time, and yet the cartilage and bone in each case are practically equally affected. In the acetabulum you will notice the almost complete disappearance of cartilage, and also notice the abundance of dark granulations which has taken its place. When the joint was first opened this had the typical appearance of unhealthy overgrown granulating tissue. The logical conclusion is, that the disease was either primarily synovial, or that it spread from the bone on one side through the cartilage to the synovial membrane, and then attacked the cartilage and bone on the other side of the joint. The appearance of the synovial membrane in this case was quite typical. The whole surface was covered with a pulpy, jelly-like mass of granulations, with here and there a bunch hanging in from the capsule, where a synovial fringe originally existed. This latter sort of thing is better shown in a knee joint, where normally the fringes are long and hang loosely in the joint. The ligamentum teres, at the time of the post-mortem, was still unbroken, but it has since been severed in the handling of the specimen. However, it can readily be seen. Notice how it has been reduced to a mere thread. Usually it disappears very early in hip joint disease, and this fact is used to explain the extensive necrosis that so frequently takes place in the head of the femur in contra-distinction to the effect of the disease in other bones.

Before leaving the cavity of the joint, just notice the irregularity of the acetabular cavity superiorly. It looks as if the acetabulum had been squeezed antero-posteriorly, and the cavity instead of being round as it is normally, is now quite elliptical with the long axis vertical. This is the commencement of the "wandering acetabulum," so typical in old hip joint disease. It is caused by the pressure of the head of the femur

upward on the acetabular surface, which has undergone a rarefying osteitis, and which, therefore, collapses, and allows the upward enlargement of the cavity. In old cases the acetabulum may in this way travel up on to the dorsum ilii for several inches.

Dislocation of the head of the femur is of frequent occurrence, but it practically never happens until sufficient destruction of the head has occurred to allow the remainder to slip past the acetabulum rim.

The effect of the long continued inflammation in the joint upon the capsule is remarkable. Although the ligaments have no histological tubercle present, they become from prolonged irritation the seat of a chronic inflammation, whose chief manifestation is a fibrosis, resulting in enormous thickening of the capsule. In the specimen you will notice that the capsu' which is normally not more than one-eighth of an inch thick, presents in places nearly an inch of solid tissue. It is of importance for the surgeon to recognize that this thickening takes place in every case of hip joint disease in order that he may put the limb in a correct attitude at as early a period in the disease as possible. If he neglects to do this, the correction of the deformity after fibrosis of the capsule has taken place, is necessarily attended by severe trauma, and is usually followed by acute exacerbation of the symptoms. In the specimen presented, for example, the thigh lay in extreme external rotation, which could not be corrected before or after the death of the patient. The tremendous thickening and shortening of the capsule posteriorly, which results from the patient constantly lying in that attitude, readily accounts for the difficulty of correction.

The subject of abscess formation has been so frequently discussed before this society, that I shall only point out its relation to this specimen, and to the anatomy of the hip. As you know, the joint is surrounded by a capsule which is thickened at three places into special ligaments, the ilio-femoral, the ischio-capsular and the pubo-femoral respectively. Between these thickened portions the capsule is much thinner, and it is through these spaces that abscesses usually burst. By far the commonest site of these three is the anterior one, between the ilio-femoral band and the pubo-femoral, underneath the ilio-psoas muscle. Here we have a bursa which lies directly on the capsule of the hip joint, and indeed, in one in every ten cases communicates with it. The specimen illustrates the course of such an abscess beautifully. You will notice on the front of the ilio-pectineal eminence the outline of a sinus, extending from the acetabulum upwards to the plane of the psoas muscle. At the time of the operation, when this abscess was cleaned out, this sinus was discovered leading down into the joint, and in preparing the specimen I was careful to preserve the wall of the sinus to show the course of such an abscess.

The specimen is really an excellent one and is a valuable addition to the museum, illustrating as it does so many of the features of acute tuberculosis of the hip joint.

PYLOROPLASTY.

By A. GROVES, M.D., Surgeon to the Royal Alexandra Hospital, Fergus, Ont.

IN the ordinary routine of practice a not inconsiderable number of cases is met with when on examination the stomach is found to be dilated, sometimes very greatly, sometimes only slightly. Usually there are cramping pains after eating, caused by the strong contraction of the stomach trying to force its contents through the constricted Pylorus. The patient has been slowly but steadily losing flesh and has usually been treated for dyspepsia or indigestion, as though these were diseases instead of being simply results of disease. If the pyloric narrowing is slight, washing out the stomach regularly will usually give great relief, but if the lumen of the pylorus is much narrowed no permanent improvement need be looked for. This condition of pyloric stenosis may occur at any age, and especially in cases where the patient has passed the middle period of life. The question will arise as to whether or not the condition is a result of cancer. In some cases it may be impossible to be absolutely certain, but if the history shows symptoms of obstruction extending over many years and no lump can be made out, it is probably not a case of cancer. The ordinary and well-known signs of cancer of the stomach will, if present, settle the matter as to the nature of the obstruction, but where these are not definite the time limit is of the greatest value. There is this to be considered, however, that simple pyloric constriction generally, if not always, is a result of ulceration, in which healing has taken place by the formation of a hard contracting cicatrix. Most Gynæcologists agree that cancer of the cervix uteri is generally a result of a laceration in which a hard cicatrix has formed, and it is claimed, and I think justly, that all cervical lacerations ought to be cured by operation, and then when so cured the danger of cancer of the part is almost eliminated. Similarly, I believe that cancer is prone to develop in the cicatricial tissue of a healed pyloric ulcer, and that for this reason, if for no other, operation ought to be very seriously considered. Aside, however, from any ulterior result which might follow, when a patient is suffering from pyloric obstruction, and it is a much more common condition than is generally supposed, its permanent cure by surgical means ought to be undertaken. There is no other rational course; indeed, pyloric stenosis is a surgical and not a medical disease. There is no medicine which will soften a cicatrix or dilate a stricture.

When an operation is undertaken for the relief of this condition, generally speaking, an anastomosis is made between the stomach and jejunum, and I have done this many times, but on careful study of the condition I have come to the conclusion that this is not in many cases the rational operation. As a general principle, the remedy ought to be applied at the diseased point; indeed, it ought always to be so applied, unless there is some absolute contraindication. Acting on this principle, I have during the last few years been resorting to the rather neglected operation of Pyloroplasty, with most satisfactory results. The danger of a vicious circle is entirely avoided, and the patency of the pyloric outlet having been restored, the stomach rapidly returns to its normal size and performs its functions normally. If the narrowing is caused by cancer, then pyloroplasty is worse than useless, but if not it is the ideal operation. In doing the operation the incision should extend well beyond the constricted portion, so much so, indeed, that the completed operation is almost a gastro duodenostomy. In putting the wound together I use a strong silk or linen thread, which is carried through the whole thickness of the stomach and duodenal wall as a continuous suture and drawn so tightly as to prevent the possibility of hemorrhage. Over this a line of Lembert suture is put in.

The whole operation is completed in a few minutes and the danger ought not to be much, if any, greater than the removal of an appendix between attacks, which is an operation practically without a death rate.

I shall illustrate the results obtained by referring to a few cases :

First.—A man aged seventy, who had been for several years losing flesh and greatly troubled with his stomach. He carried a stomach tube with him, using it several times daily to get relief. His appearance would lead one to suspect cancer, but there was no lump, and considering the length of time the trouble existed this was a favorable sign. On cutting down, a tightly constricted pylorus was found, and a pyloroplasty was done. The relief was immediate. He never vomited or required to use the stomach tube after. Before the end of two weeks he was taking ordinary diet, restricted only as to quantity, and was in every respect well. At the time of operation he weighed one hundred and thirteen pounds, which in less than a year went up to one hundred and eighty-two. Now, at the end of four years he is entirely well.

The next case I would refer to was a man of fifty-two, who, like all such cases had been treated for so-called indigestion, for many years, and was steadily getting worse. He came to the hospital for treatment but refused to allow an operation. On the third night perforation took place and he consented to an operation, which was immediately undertaken. The perforation was found to be at the beginning of the du-

denum and a pyloroplasty closed the opening and restored the lumen of the constricted part. He had an uneventful recovery and has enjoyed the best of health ever since.

In order not to make this paper too lengthy I shall only refer to one case more. This was a lady aged forty years, whose symptoms had existed years, her stomach was greatly dilated and as she bore a stomach tube badly her suffering was very considerable, and she was very thin. In this case the constriction was more than two inches long, the incision was extended well into the healthy stomach at one end and the duodenum at the other. After the operation she had vomiting for four days, partly due, no doubt, to the anæsthetic, but I think also to the loss of tone in the dilated stomach. It was not serious and ceased entirely on the fifth day. From that time forward she had no stomach symptoms, and expresses herself as being as well as she ever was.

In my opinion, pyloric ulceration and stricture are very often conditions preceding cancerous degeneration, and that if these conditions were removed cancer would not develop. Again, many people are suffering from and being treated for indigestion caused by a constriction which could easily be cured. In these cases it ought to be clearly explained to the patient that the ordinary treatment is only symptomatic, but that an operation, not in itself specially dangerous, will be followed by a complete cure. Anyone who is not familiar with pyloric surgery will be surprised at results obtained with such little danger. The operation ought to be done early, while the stomach is still in a healthy condition and before it has become dilated. When these cases are treated rationally, I believe, pyloric cancer will to a great extent cease to exist.

PSYCHO-THERAPEUTIC TREATMENT.*

By GEORGE S. YOUNG, B.A., M.B., Toronto.

THE word disease or dis-ease, indicates in its derivation the mental aspect of ill-health. To the patient himself sickness is a complex of disagreeable feelings. He experiences pain or weakness. He is apprehensive of danger or he worries about his affairs. He may suffer from any or all of a score of discomforts. It is part of a physician's daily routine to relieve some of this distress by an appeal to the mind. We convince him that the interruption in his business is only temporary. We minimize his weakness, emphasize each sign of improvement and try by every means to turn his attention away from his aches and pains.

Undoubtedly this sort of psychic treatment has a therapeutic value beyond the mere alleviation of suffering. Certainly hope fortifies a

* Read at the Clinical Meeting, Orthopedic Hospital, December 11, 1909.

patient in his struggle against disease. However, the actual curative value of an appeal to the mind must depend on the part the mind plays in producing or aggravating the trouble. Further, I think we are justified in saying that when the psychic is a causative factor in disease there is only one rational way of reaching that factor, and that is by psychotherapy—a treatment directed to the mind itself.

No one knows better than the physician what profound effects the mind may have on the body. Mental shock or anger may produce jaundice; fear may cause syncope or diarrhoea; excitement or depression may totally destroy the appetite. Suggestion may result in paralysis or muscular contractures; or under hypnosis may even cause vesication, or hemorrhage from skin and mucous membrane. Concentrating the attention on the heart's action may cause palpitation. One might go on thus indefinitely. The experiences of every physician would add new examples of mental action on bodily functions.

It is interesting to analyze what occurs in the case of vesication under deep hypnosis. Suppose a child, who knew absolutely nothing about the nature of heat, to be hypnotized and then the suggestion made that a lead pencil applied to the arm were red hot. There could be no result because there would be no material in the child's experience out of which he could construct in his mind a picture of a burn. If, on the other hand, he had had the usual accidents of childhood with the accompanying visual, painful and thermic sensations, there would be something in the brain which would enable him to imagine a burn. Under these conditions suggestion has occasionally produced an inflammatory reaction and even vesication.

If body and mind can "reverse" in this way one needs to be cautious in deciding what diseases are psychic in origin. We may rule out the toxæmias, the infections and all others with discoverable organic lesions. But when we come to functional troubles—the so-called neurosis—including not only Hysteria, Neurasthenia and Traumatic Neurosis, but a whole host of minor disorders which make up a very large part of a physician's office practice—then we are dealing with cases which medical men are beginning to label psychic. Without spending time to discuss the correctness of the label in *all* cases, one can at least say:—

(1) The physician frequently cannot resist the conclusion that if the nervous patient could only see his trouble as he (the physician) sees it, a great advance toward health might result.

(2) Just as in specific disease our final diagnostic test may be: Does it react to Potassium Iodide? So in the Neuroses we may ask the question: Does an appeal to the mind do them good? There can be only one answer. It not only does them good, it often cures them.

Probably thousands of neurotics are being cured every year by Christian Science, faith cure, absent treatment, Emmanuel movement, etc. The medical profession as a whole stand in the background and look with disgust on the ignorance displayed, and the deception and fraud sometimes practised, but fail to notice that cures are being effected on every hand. The medical schools are even more conservative. The student, who after graduation will consciously or unconsciously practise psycho-therapy every day, is not taught the first thing about the mind, He learns everything about "Nux Vomica," but nothing about "hope." Perhaps the worst thing of all is that he is allowed to leave college without realizing that serious nervous troubles may grow from very small germs, which he may ignorantly plant or might intelligently eradicate.

By far the greater part of psycho-therapeutic treatment is given by people outside the pale of legitimate medicine. Prof. X. cures by auto-suggestion and on receipt of the proper fee will provide you with a series of affirmations which you make night and morning. You declare to yourself that you are free from pain, that you are buoyant, happy, self-confident and any other things pertaining to your particular trouble. We say "fake," but I have seen a case of constipation cured in this way. In faith cure suggestion and auto-suggestion are the important factors. Expectant attention reaches its climax in a usually sudden conviction that the cure has been accomplished; and in so far as the psychic element in disease is concerned, "as a man thinketh in his heart, so is he." Christian Science starts with the assumption that mind is the only reality and argues pain and distress out of existence. Its greatest folly consists in ignoring the results of pathological and bacteriological investigation, but it is wonderfully effective in dealing with psychic troubles because (1) it directs attention powerfully away from bodily discomforts by an absolute negation of their existence. (2) It quiets mental unrest over religious problems. (3) Its adherents being in the minority fight hard for their beliefs and in doing so add strength to their convictions. The Emmanuel movement endeavors to base its principles on scientific principles. It is open to at least two objections: (1) Its overuse of auto-suggestion tends to a morbid introspection, and (2) it is in the hands of untrained, over-enthusiastic individuals.

Hypnotism in selected cases often gives good results. Its action is in the inhibition of the higher centres leading to greatly increased suggestibility. There seems to be a danger of operators using hypnotism indiscriminately. Even a conservative specialist like Tuckey speaks of his "good subjects." The tendency to experimentation is great. Professional subjects of travelling hypnotists are dreamy and listless in appearance. The very fact that the individuality of the patient is lost in the hypnotic state is a warning against frequent séances. Suggestion

under hypnosis is more likely to cure symptoms than the underlying nervous condition.

Freud's psycho-analytic method is based on a conception of hysteria and certain other neuroses, which is roughly as follows. A man in a fit of anger has an intense desire for revenge. The nervous tension may be relieved at once by thrashing the object of his anger or it may gradually disperse through mental paths opened up by the higher faculties of reason and judgment. But suppose it should be necessary to suppress this desire on the instant and crowd the incident out of consciousness. Then the nervous excitement might expend itself along a new path leading to one of the numerous hysterical manifestations. This substitution of a new nervous path for the normal one is termed "conversion" and the instant of its occurrence "the traumatic moment." Its cause is the "repression" of a psychic state which the patient strives to forget. Now one cannot actually forget by trying. He simply splits off from consciousness a psychic group which remains under the surface, *i.e.*, subconscious. It stays there like a foreign body disassociated from ordinary consciousness, but liable in hypnoid states such as dreams, reveries, etc., to gather about itself new associations. The hysterical symptoms appear or remain in consciousness as the "symbol" of what is hidden in apparent forgetfulness. The "psychic trauma" inflicted by suppression and conversion tends to create a dual personality—(1) the normal consciousness, including an hysterical condition overlying and symbolizing; (2) a subconscious psychic group of which the nucleus is the suppressed idea.

Freud's aim is to bring this subconscious group into consciousness where the patient can see it and discuss it freely. Then it will cease to be a foreign body. It will become subject to the normal associative corrections of consciousness. The abnormal path leading to the hysterical manifestations will no longer be necessary and the morbid symptoms disappear at once and forever. This is the "catharsis" of the psycho-analytic method. The technique is something like this: The patient lies comfortably and relaxed on a sofa, the operator sitting behind the head of the couch. Freud at first employed hypnosis as giving him more direct access to the subconscious. Later he used what he calls "the technical trick" of pressing the forehead when urging the patient to recall some forgotten incident, but finally he dispensed with even this and relies on persuasion and tact. The patient freed from all distracting influences, with eyes closed concentrates his attention on the history of his illness. First he talks all he can remember. The operator cannot yet see any relationship between the particular hysterical symptom and its hidden cause. He must go deeper and he has this to guide him in his analysis: The symptom must have some reference to the scene

of the traumatic moment. For example, in moments of intense mental distress we look for relief in forgetfulness. We say, "We must banish this thing." But the driving out of one thing from consciousness must mean the replacing of it by something else, and by the laws of association the new thing must be connected in some way with the old. Freud mentions a patient who in a traumatic moment happened to be in a room where there was burning pastry. The odor remained as a subjective symptom afterwards. It was the symbol in consciousness of a disagreeable idea, which had been repressed. In like manner we might conceive of a traumatic moment where the hallucination of a cross would appear through the patient's suppressing an idea as incompatible with a religious standard.

By infinite patience, by repeatedly urging the patient to tell exactly what enters his mind whether it seems to have any bearing or not the operator succeeds in overcoming the same resistance that has kept the secret buried and the patient at last recalls it and freely discusses it. The hysterical symptoms vanish and the cure is complete.

Without reading Freud no one can realize the intricate windings of the path that leads to the heart of the suppressed idea, the side tracks, the partial traumas adding new complexities, the resistance of the patient in recalling the ugly and disagreeable, the tediousness of the process and the thorough mastery of psychology required by the operator. For the differentiation of the neuroses it is a diagnostic triumph. It has led Freud to separate from Neurasthenia a symptom group, which he terms anxiety neuroses, including phobias, anxious expectations, hyperaesthesia to pain, etc., and to class the compulsion neuroses like obsessions with hysteria as having a similar etiology. Further, he has been able by this method to unravel the tangled threads in the mixed neuroses. As a therapeutic measure psycho-analysis has given the most brilliant results and it is no disparagement to mention its limitations, some of which apply equally to other methods of psychic treatment. (1) It demands an intimate knowledge of normal and abnormal psychology, a thorough training and exceptional personal qualifications. (2) It establishes confidential relations between doctor and patient which may be unpleasant and a source of danger to the former. (3) The cure is tedious and the financial question cannot be overlooked. (4) The treatment is symptomatic. The predisposition remains and there is nothing to prevent the patient "breaking out in a new spot." (5) It is not applicable to all nervous troubles.

Freud does not attribute his results in any way to suggestion. Nevertheless, one cannot overlook certain outstanding features of the treatment. The patient gradually learns that his malady is mental in origin and that the physician is on the right track. The latter cannot

help showing his satisfaction as he approaches the core of the trouble. This inspires hope and increase expectancy of the result. The journey has been long and fraught with pain, but Mecca is almost in sight. Once there, nothing more will remain to be told and the resistance will end. At Mecca the physician expects a cure and so finally does the patient. Can suggestion be excluded as a factor in the result?

All of these methods of psychic treatment have cures to their credit and have features worth studying. The future scientific psycho-therapy will grow out of the truths that are in them all. This much can be said at the present time: (1) No psychic treatment can stand unless it be based on truth. Deception and fraud are makeshifts to be avoided. (2) Psychic treatment must be founded on psychology. Electro-therapy requires some acquaintance with electricity. Psycho-therapy demands a knowledge of the laws of mental function. I would like to add a third essential, although this may be open to objection. Psychic treatment may be directed to different levels, so to speak, of the mind. It may be necessary to begin low, but in the end the higher we get the better. The nearer we approach to the individuality, the man himself, the more likely we are to get permanent results.

Modern psychology is largely based on nervous physiology and anatomy. It does not attempt to solve the problem of the ultimate relation between the mind and the brain, but recognizes as a fact that for every mental state, whether sensation, emotion, thought or volition, there is a corresponding cerebral change. The following are a few of the psychological data which bear particularly on psycho-therapy.

The simplest nervous unit of which we can conceive is a single sensory-motor arc consisting of an afferent limb for ingoing currents, a central station (the cell body) and an efferent limb for outgoing messages. The brain and spinal cord are said to contain myriads of somewhat similar units or neurones in groups and systems superimposed, those above controlling or inhibiting those below. Just at what point in the up-growth of the nervous system consciousness emerges is unknown, but we do know that with the repetition of sensory-motor reactions the fibro-cellular structures become set or fixed in their activity and consciousness tends to rise to new levels. The older and more fixed structures have become specialized for certain functions and do not get the conscious attention that was necessary at first. On the material side we may illustrate by the case of a bricklayer at work. As each course of brick is laid it becomes fixed and specialized for a certain weight or strain. The bricklayer, like consciousness, withdraws his attention largely from the work done. His concern is with the growing wall above. On the functional side we may picture a man who beginning with a small shop gradually builds up a departmental store. At first every detail is under

his direct control, but with increasing business the work is divided up among employees, the owner exercising only a general oversight. The piano player is a familiar example. At first each finger and key require the closest attention, but with repetition of the movements the mechanism of the process requires less and less attention until finally it becomes subconscious. This law of habit applies to all mental states. To quote Dubois: "The repetition of an emotional movement facilitates its reproduction and the more the reaction is established in the lower centres, the more it escapes from the control of the psychic ego." Notice that it is not the result or effect which becomes subconscious, but the process by which it is brought about. Consciousness is always busy with something, but that something is largely determined by the subconscious which itself was at one time part of conscious experience. One would naturally infer this from the fact that the more fixed mental processes are paths of least resistance along which the mind travels with the smallest effort.

We are to a large extent slaves to the already fixed tendencies of the subconscious and the latter depends again on the control exercised during the time that it was part of conscious experience. The mind makes the tools it works with, sometimes, it is true, out of bad material. It grows in efficiency or inefficiency through its own activity. At every stage there is evident a control or lack of control and its influence is over the conscious rather than the fixed subconscious. Lack of control is a factor in all nervous troubles, not so much because it is operative now in the full grown neurosis, but rather because at some previous time it led to the formation of certain mental habits or tendencies.

There is another psychological fact which brings us a little closer to the mental deviations of the neurotic. I see a strange face on the street. The occurrence slips out of consciousness. A month later I recall to mind that face with all the attending circumstances. Now the incident touches consciousness at two points—the moment when the face was seen and the moment when it was pictured again in the mind. Where was it in the interval? Psychology, in giving the explanation of memory, says that in the first instance there was a cerebral modification which persisted, and by means of this the face is re-presented in consciousness. In other words there is the same basis for the original group of sensations when the face was seen and the recall a month later when the face was pictured in the mind. There is this difference, however, between the two in consciousness. The re-presentation lacks the vividness and clearness that characterized the original presentation. This difference in intensity helps us to distinguish between what we see and what we picture in our minds. But concentrating the attention on an image may increase its vividness to such an extent that this distinguishing mark

disappears and we confuse the image with the original presentation. This is all the more likely to occur when the attention is so focussed on the image that associated ideas of time and place are shut out. Even in health we are in constant danger of accepting the imaginary for the real. People often feel an electric current when they pick up the electrodes of a battery even before the elements have been immersed. It is not until we bring to bear the corrective influence of our reason and judgment that we can distinguish between the actual and the picture. This principle, like the law of habit, is widely applicable. All the sensations that come from our bodies and the world around us we can represent in consciousness. Neurotics are particularly prone to confuse the re-presentation with the original.

Other psychological facts might be mentioned, but like these they all point in the same direction: Self-control and a critical attitude toward bodily sensations and the creations of the mind make for a healthy psychic life. They are conspicuously absent in the neuroses. Only by a mental and moral re-education can they be restored. Not until this is accomplished can the neurotic guard against the troubles to which he is almost always hereditarily predisposed. Symptoms may (they do not always) necessitate other methods of treatment, but the cure is not complete until the patient knows and can control himself. Here we are on ground where every physician can do something. Just how much he may accomplish will depend on his definiteness of aim and his knowledge of psychology and human nature. Re-education is the key-note of Dubois' system of psycho-therapy. We need not accept his philosophy nor follow closely his methods. The latter are those of a specialist with the prestige of a great name and the advantages of institutional oversight for his patients.

In the first place, accurate diagnosis is essential. One of the most powerful factors in treatment is personality. Most of its ingredients are heaven-born. Nevertheless, a profound conviction that you are right goes a long way toward making personality. Secondly, neurotics are to a large extent the products of heredity and environment. For this much they are not responsible, and hence require from us sympathy, patience and firmness.

From the very beginning of treatment, educational methods must deal with the truth. The physician must believe what he says and he must make the patient believe. Now, belief may arise in two ways. A man may believe because an appeal is made to his reasoning faculties. Or he may believe because he accepts without question as to its reasonableness the statement of one who speaks with authority, or in whom he has confidence. The latter is a sort of hypnotic affair. It is not the highest form of belief and yet education is constantly making use of it as a stepping-stone to the belief which is based on the exercise of the

higher faculties. However we do it, we must not go faster than the patient can follow. The bald statement: "Your pain is imaginary," will not carry conviction, because, to the patient this means: "You have no real pain." As a matter of fact, the pain is real enough, but he has *produced* it by faulty mental processes. The possibility of this he has to learn through explanations and illustrations tactfully given.

There are certain things that we think about most frequently. They have associational ties with nearly all other mental groups and we find ourselves coming back to them again and again, no matter where we start. We might perhaps call them personal interests. They naturally guide and mould thought and influence the conduct of life generally. But more than that, they help to create a mental atmosphere which may be dark and gloomy or bright and cheerful. The first permanent interest to implant is "conviction of cure." Put before the patient the joy of health as something that will surely come. Put behind him, if you like, the fear of invalidism. Then you will have a *vis a fronte* and a *vis a tergo*—a combination of forces that is hard to resist. Other interests can be chosen as one studies the intelligence and peculiarities of the patient. Weir Mitchell gets some of his patients to carry notebooks in which to jot down word-pictures of scenery, bits of color, etc. The idea is to open their eyes to the beautiful and give them new and pleasant things to think about. There is more psychic treatment than rest cure in Mitchell's writings, if one reads between the lines. Neurotics are self-centred, if not selfish. If I had a sanatorium for nervous cases I would have each patient, if possible, helping his neighbor—not of course by command, but rather by strategy.

Lack of control is one of the most difficult problems to deal with. Success here depends on beginning with little things. One may start with system and method, *e.g.*, a time-table for each day. The patient may be given things to do which involve some discomfort. Baths, no doubt owe much of their efficiency to the little habits of control that they establish. Judicious praise of a patient's tolerance of discomfort builds up in him a pride in his ability to bear pain and leads to stoicism as an ideal. It is largely an educational matter. We get results with children. One can get them with adults.

What has been said here as to the educational method is merely suggestive. Special symptoms may require special treatment, but the object throughout is to make the patient master of himself. Results from treatment along educational lines have made me an enthusiast on the subject. It is the psycho-therapy par excellence for the general practitioner. One may have astonishing success even with the graver forms of nervous trouble. As for the milder neuroses—we do well to remember that *some* physician has had an opportunity to deal with nearly every serious case at a time when it was merely in the bud.

CURRENT MEDICAL LITERATURE

MEDICINE.

. Under the charge of A. J. MACKENZIE, B.A., M.B., Toronto.

THE AMOUNT OF LUNG INVOLVEMENT AT THE ONSET OF PULMONARY TUBERCULOSIS.

In the *Medical Record*, September 11th, 1909, Barnes, of the State Sanatorium, R.I., discusses the question as to the amount of lung involvement which is commonly present in the case of tuberculosis which present themselves for treatment.

It is well recognized that persons frequently suffer from this disease without recognizing the fact, as it is often discovered post-mortem in those persons who have died from other causes, but in an investigation these must necessarily be neglected for statistical purposes. In many cases the first indication has been lassitude, digestive disturbance, etc., but usually the earliest symptom which can be definitely referred to the disease is cough, as the patients naturally remember this afterwards.

Of 860 patients 120 were received within two months of the onset, and of these 33 were admitted within one month, of these 67 had bacilli in their sputa on admission, of the 52 remaining 34 reacted positively to the tuberculin test, and of the remaining 18 there were signs considered diagnostic apart from these two tests. These were then classed according to the plan of the National Association as: Incipient 25.8 per cent., moderately advanced 65 per cent., far advanced 9.1 per cent.

In 33 cases but one lung was affected, in the remaining 87 both, one lobe in 25 cases, two in 36 cases, 3 in 27 cases, four in 22 cases, and 5 in 10 cases. Dulness was present in 74.1 per cent., interrupted breathing in 18.3 per cent., bronchial breathing in 11.6 per cent., the apex was involved in 83.3 per cent., and cavity signs were present in 8.3 per cent. Cough was the first sign noted in 74 per cent., and hæmorrhage in 10.8 per cent.

The symptoms were: Fever in 48.3 per cent. before admission and in 30 per cent. after, 85 per cent. had had cough, 80 per cent. expectoration, 36.6 per cent. hæmorrhage, 21.6 per cent. pleuritic pain, 33.3 per cent. dyspnea, 57.5 per cent. loss of appetite, 85 patients had averaged 9.9 pounds loss of weight, 33.3 per cent. had had chills, 49.1 per cent. night sweats, and 40 per cent. gave a history of marked exposure to infection.

Of the 91 patients who have left the Sanatorium the condition on discharge was: Apparently cured, 15 cases; arrested, 31 cases; im-

proved, 24 cases; unimproved, 21 cases. Of 26 who had severe onsets who could be traced, 12 died within an average of nine months after admission, ten are living and but 4 are well.

STATUS OF THE PRESCRIPTION.

The following declaration was adopted at the April meeting of the New York branch of the American Pharmaceutical Association: (1) The prescription should be a signed and dated order from the physician to the pharmacist to prepare and deliver certain medicines, etc., to the patient. The prescription should be written plainly and distinctly, in ink if possible. It should bear the full name of the prescriber, either printed or written, and should state the name of the patient, and if a child, also the age. A telephoned prescription, that is, a prescription which in case of emergency the physician telephones to the pharmacist, must in all cases be repeated by the pharmacist, so as to avoid misunderstandings, and should be followed, especially in the case of potent drugs, with a written order from the physician. In case the physician intends to prescribe an unusually large dose, the quantity of drug should be underlined and be followed by an exclamation mark. General directions, like "As directed," etc., should be avoided. (2) The pharmacist who dispenses the medicine should invariably retain the original prescription for future reference, and as a record, for a limited period, say five years. This for his own protection, as well as that of the prescriber and the patient. (3) The medicine prescribed should be supplied not more than once on the same prescription, in the following instances: (a) If ordered by the prescriber "not to be repeated" or marked "Ne repetatur"; (b) if it contains medicinal substances, commonly called narcotic or habit-forming drugs; (c) if asked for by some person known not to be the original holder. (4) One copy of the prescription may be furnished to the patient, but to no other person. This copy should be marked "copy" or "copia," and should be plainly and distinctly written in ink. In the event of the prescriber not desiring a copy to be given, he should note this on the prescription by writing the words, "Give no copy." It would be desirable to have such notation appear on every prescription. Under no circumstances should a copy of the prescription be given, without consent of the physician, after the patient has recovered.

CLINICAL DIAGNOSIS OF PULMONARY TUBERCULOSIS.

In the *New York Medical Journal*, August 14th, 1909, Miller, Director of the Bellevue Hospital Tuberculosis Clinic, writes on this subject.

He deprecates the idea that the detection of the disease in the early stages is a matter either for the specialist or the laboratory worker, however valuable their assistance may be, the family practitioner is the man in the best position to see the early signs, the means of diagnosis are always in the reach of the careful and open-minded clinical observer, and on him rests the blame if failure is fatal.

The history of the family, patient, and of family conditions, are of the greatest importance; of previous diseases and present complaint, and the combination of any two of the following symptoms should certainly cause suspicion.

The more usual methods of onset are: (1) The catarrhal or influenzal in which the cough is the principal symptom; (2) the malarial, so-called, in which general malaise, loss of appetite, slight rise of evening temperature, and perhaps mild digestive disturbances come on gradually, with or without cough; (3) hæmoptysis which should always be considered to be due to tuberculosis unless another definite cause can be demonstrated; (4) gastric disturbances obscuring other more definite symptoms for a varying period of time; (5) anæmia without apparent cause, especially in young girls in whom the frequency of chlorosis may put one off guard in regard to the underlying infection; (6) pleurisy with effusion is not an infrequent mode of onset and should be considered tuberculous unless prolonged observation proves the contrary; (7) pain in the chest, usually dull aching in character, and referred to the shoulder blade is by no means an infrequent first symptom, and one which is often disregarded.

Physical examination must be the mainstay of the diagnosis and consists of two main divisions: (1) That of the lungs for the determination of the lesion; (2) general examination and observation of evidences of toxæmia. While all methods of examination are important, there is no doubt that auscultation gives the greatest amount of information and should be chiefly relied on; certain areas should be examined with the greatest care, viz.:

Certain areas of the chest are of course to be examined with special care. In the approximate order of their importance they are, the apices above the clavicle; the apices posteriorly in the suprascapular fossæ; the first intercostal spaces, particularly the inner and outer extremities; the interscapular region, just below the level of the fourth dorsal vertebra corresponding to the apices of the lower lobes; the area along the vertebral border of the scapula when the arm is thrown well forward with the hand on the opposite shoulder, this area corresponding to the septum between the upper and the lower lobes; an area internal to the angle of the scapula corresponding to the lung area in proximity to the bronchial

glands; and finally, in children, the fifth and sixth intercostal spaces just outside the nipple line.

X-ray examination of the chest is of great interest when the photograph is interpreted by an expert. Physical examination for evidences of toxæmia should include search for the signs of anæmia, slight dyspnea, rapidity of pulse, slight rise of afternoon temperature, loss of weight and evidences of fatigue.

- The writer emphasizes the following points as a summary :

1. The attitude of every physician toward tuberculosis should be that of constant suspicion.

2. The history of intimate exposure to infection and a detailed inquiry into previous illnesses are of the greatest importance.

3. A properly conducted physical examination is the cornerstone of the diagnosis, but physical signs of tuberculous toxæmia are quite as important as are the signs in the lungs.

4. Prolonged observation and repeated examinations are often essential.

5. Failure to find the tubercle bacilli in the sputum and other excretions is evidence of little value.

6. The tuberculin tests are valuable in connection with the clinical manifestations, but their exact significance is not yet absolutely determined.

7. In general, the diagnosis is based upon no one symptom, sign, or test, but upon a careful correlation of all the evidence into a rational clinical picture.

THE USE OF NITRITES TO LOWER BLOOD PRESSURE.

In the *New York Medical Journal*, June 12th, 1909, there is an article detailing the results of experiments made by Wallace and Ringer, showing that amyl nitrite, nitroglycerine, sodium nitrite, and erythrol tetranitrite all cause a uniform fall of blood pressure; the higher the blood pressure the greater the fall, and the effect is to a certain degree proportionate to the size of the dose. Inhalation of amyl nitrite produces almost instant effect; nitroglycerine by the mouth takes two minutes; headache following their use is rare if the tension is high. Where the arteries are hard they respond and the result is more lasting in cases of hypertension than in the normal conditions; the effect of erythrol tetranitrite in the case of hypertension averaged three hours, in the normal on hour; the action of sodium nitrite lasts two hours in the abnormal case and nitroglycerine half an hour.

GYNÆCOLOGY AND ABDOMINAL SURGERY.

Under the charge of S. M. HAY, M.D., C.M., Gynæcologist to the Toronto Western Hospital, and Consulting Surgeon, Toronto Orthopedic Hospital.

OPERATIVE INDICATIONS IN FIBROMA UTERI.

J. L. Faure (*Presse Méd.*), says that the evolution of fibroma uteri makes of it a unique growth, no other pathological tissue increasing and then spontaneously undergoing regression at the moment of the menopause. It is a tumor that for an indefinite period causes no symptoms and then may undergo regression without having been recognized. There is no reason for operating on every fibroid as soon as it is diagnosed without waiting to see whether it causes symptoms. At the same time, we should recognize that this growth is a serious affection, and one that should be watched from time to time to see if it is producing any of the serious symptoms: hemorrhage, pressure, and disorganization of the kidneys from obstruction of the ureters. When any of these occur we should not hesitate to operate. When these tumors grow rapidly it is generally because they are undergoing sarcomatous degeneration and taking on a malignant character. Whenever the general condition of such a patient grows rapidly worse it is time to operate. When pain, weight in the abdomen, and hemorrhage are making the life of the patient miserable and the woman is of the working class and must be on her feet and cannot rest, we should disembarass her of her burden. These symptoms are gradually aggravated, and a time will come when the patient can bear no more without becoming an invalid. The time of life of the individual has an important bearing on the conduct of the case. In a young woman it is necessary to operate. But in a woman who is near the menopause it is best to wait and see if atrophy will not remove the necessity of an operation. Especially at the menopause will any sign of degeneration of the tumor call for immediate operation.—*American Journal of Obstetrics and Diseases of Women and Children*, June, 1909.

OVARIAN TRANSPLANTATION.

Immediately after operation for adherent retroversion of the uterus and removal of the adnexa for double tubo-ovarian disease, G. A. Casalis (*Jour. Obst. Gyn. Brit. Emp.*), transplanted a piece of the fairly sound ovarian tissue to the broad ligament, between its folds and close to the uterus. Two and a half months later menstruation reappeared and has recurred every twenty-four or twenty-six days for four

years. During the last year, however, the patient has, at different times, been seized just before the onset of her periods with peculiar attacks of a somewhat alarming character. She generally has a violent headache, followed by an intense pain over one part or other of the abdomen. She then has three or four severe rigors, becomes blue in the face and extremities, almost pulseless, vomits incessantly, and frequently passes one or two offensive motions. Then about four to five hours after, sometimes much sooner, a reaction sets in; she breaks into a heavy perspiration, the face is flushed, the pulse bounding, and the menses almost immediately makes their appearance. Contrary to her own statements, the flow is evidently lessening. Bimanual examination shows the transplanted ovary not to have decreased greatly in size, but to have become hard, probably mostly fibrous.—*American Journal of Obs. and Dis. of Women and Children.*

THE COLON TUBE AND THE HIGH ENEMA.

H. C. Soper, St. Louis, *Journal of the American Medical Association*, describes experiments performed by him in which the position of the tube was verified by the x-ray. Sixty cases were examined where it was attempted to pass long blunt end soft rubber tubes, with side openings, into the rectum, the patient being in the knee-chest and side positions. The only case in which he succeeded in passing the tube above the dome of the rectum was one of Hirschsprung's disease or congenital idiopathic dilatation and hypertrophy of the colon, and even here it was necessary to use the sigmoidoscope to introduce the tube. He thinks it is only in cases of abnormal development of the sigmoid that it is possible to introduce a soft rubber tube higher than six or seven inches in the rectum. A short tube six inches in length is therefore best for all sorts of enemata when using water for fecal evacuation, and it is possible, as he has frequently demonstrated, to thoroughly cleanse the entire colon by using a large calibre (one-half inch) short tube. It is also best when retention of liquid is desired.—*American Journal of Surgery*, October, 1909.

PERFORATION OF THE UTERUS DURING INSTRUMENTATION.

A. P. Heineck (*Pac. Med. Jour.*), says that most perforating instruments are aseptic and it can also be reasonably assumed curettage of the uterus. He urges that there should be no curettage without general anesthesia, so that movements of the patient may not lead

to such an accident, and no curettage without ample cervical dilatation. As regards treatment, he advises that if the uterus is nonseptic, if the perforating instrument is aseptic and if it can also be reasonably assumed that there is an absence of omental or intestinal or important vascular lesions, the treatment to be followed is one of armed expectancy. The patient must be confined to bed and immobilization enjoined for at least three days. The patient's pulse, temperature, facies, and abdomen must be carefully watched. A suppurative cellulitis, signs of internal hemorrhage, etc., call for intervention. A wick of gauze may be inserted into the uterus, but it should not be introduced much beyond the internal os. In all cases in which there has been a prolapse of the omentum, or of intestines into the uterine cavity; in all cases in which associated injuries to the intestines or omentum coexist, or in which there are reasons to fear a significant internal hemorrhage, laparotomy is urgent. Once the abdominal wall has been opened, the visceral lesion must be repaired. The uterine puncture, if small, need not be sutured. If large, if of the nature of a tear, of a laceration, it is better that it be sutured. One or two layers of sutures may be used. Whether small or large, if the perforation be the seat of hemorrhage it should be sutured.—*Am. Jour. of Obs. and Dis. of Women and Children.*

OBSTETRICS AND DISEASES OF CHILDREN.

Under the charge of D. J. EVANS, M.D., C.M., Lecturer on Obstetrics, Medical Faculty
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CONGENITAL HEART AFFECTIONS.

Dr. George Carpenter, in the Whiteman lecture, *British Med. Jour.*, 16th October, 1909, delivered before the Royal Medical Society in London, discussed in a very interesting manner congenital heart affections, especially in relation to diagnosis.

Attention was called to the fact that congenital heart affections are usually associated with other bodily effects.

These heart malformations seem to be hereditary in some instances, therefore it is undoubted that defects in the sperm and germ cells of the parents must be of some importance in their production.

Attention is called to the fact that the heart is perfectly formed, though in miniature, in seven weeks' time from the date of conception.

In the production of these affections, two distinct processes can be seen in action—developmental disturbances and inflammation. One can operate without the other but both are frequently combined. The bulk

of congenital malformations of the heart appear to be due to developmental errors. In a large proportion of these cases cyanosis is not a symptom. Some children, in fact, are fresh colored, while others are strikingly pale, though the majority are cyanosed more or less. In the majority the cyanosis dates from birth, but in others the children show no signs of blueness until after an attack of one of the exanthems, or following bronchitis or pneumonia.

The most common malformation in association with cyanosis are those where the pulmonary artery or conus is either absent, rudimentary or constricted. Cyanosis appears to depend upon the conformation of the heart, which is placed at a disadvantage being unable to deliver a sufficient quantity of blood to the lungs to be aerated, but in other cases the lungs display microscopical alterations, particularly in the capillaries. These changes permeate the whole lung structure and interfere with aeration.

Clubbing of the finger tips occurs in two varieties, in one of which there is a marked osteoperiostitis. It is most frequently found in cases of pulmonary atresia and stenosis.

The retinal blood vessels are generally revealed as showing considerable congestion on ophthalmoscopic examination. Some children show an increase of hæmoglobin along with polycythæmia, while others show a deficiency.

There is no definite murmur in congenital heart lesions. The murmurs are usually systolic and there is a peculiar murmur which is carried through systole and diastole which points to a patent ductus arteriosus or a communication between the pulmonary artery and the aorta. Murmurs may be detected at one auscultation which may not be heard at the next. In 7 per cent. of the author's cases murmurs were absent. A systolic thrill of the greatest intensity at the second left interspace and conducted towards the corresponding clavicle is pathognomic of patent ductus arteriosus.

Defects of the interventricular septum are the most common malformations of all. The combination of pulmonary stenosis, deviation of the aorta to the right, and patent septum ventriculorum is one of the most usual forms of congenital morbus. These do not always produce murmurs. The author dwells on the detection at the apex of a healthy first cardiac sound audible through the bruit, in the diagnosis of a patent septum ventriculorum.

While defects of the interauricular septum are frequent they are rarely extensive, and a widely open forearm may be looked upon as an anomaly. A point of clinical interest about defects in the interauricular septum as in interventricular septum, is that septic and other particles

may be carried from the venous system direct to the arteries of the brain and body.

Stenosis of the pulmonary region occurs nearly three times as frequently as atresia and in a large majority of these cases the interventricular septum is patent.

The author states that the prospect of life varies according to the defect. In atresia with a closed septum the children die in infancy. If the septum be patent the child may live a few years in place of a few months. In stenosis with a closed septum middle age may be reached, but with a patent septum adult life is the limit.

The disappearance of cardiac bruits in children may be explained by tardy closure of the ductus arteriosus. This closure appears to be about the only thing possible in the way of a cure of the congenitally deformed heart.

Coarctation of the aorta may not interfere particularly with longevity and the condition may not be suspected. It may give rise to heart failure preceded by phenomena suggestive of mitral disease.

Acquired aortic disease is not as rare in children as is commonly supposed, and there is no doubt that some are of congenital origin.

In aortic disease in children the bruit is heard loudest over the pulmonary area and not over the aortic cartilage.

INTESTINAL PERFORATION DURING TYPHOID FEVER IN CHILDREN.

John H. Jopson and J. Claxton Gittings, in *Am. Jour. Med. Sc.*, November, 1909, states that Elsberg, in 1903, published a study of 25 cases of perforation in a case of typhoid in children operated upon. The authors have collected reports of 35 cases of perforation occurring in 2,274 cases of typhoid fever in children.

In collecting cases of perforation for study, the authors have analyzed only those in which operation was performed and perforation proved.

In another portion of the paper they mentioned that they found 45 cases in subjects 15 years of age and younger. A list of these cases is given with a record of where they were published. There were 4 children 5 years of age, 2 recovered and two died. There were 21 cases under 10 years of age, with a mortality of 56.5 per cent.

The authors conclude that typhoid perforation is very rare under 5 years of age; after this period it is not infrequent, being about half as common as in adults. The favorite time of perforation is at the end of the second and during the third week.

The diagnostic symptoms in order of their importance, are pain, tenderness, rigidity, fall in temperature, rise in pulse rate and collapse, vomiting, chill, and rising leukocytosis. The mortality after operation is influenced by the severity of the disease, rather than by the protracted course. It is lower under 10 years of age than after this time. The majority is lower in relapsed than in unrelapsed cases. The average mortality is somewhat less than 50 per cent. and at least 25 per cent. lower than in adults. The earlier the operation is performed the better the prognosis. The technique of the operation does not differ materially from that advisable in adults, except in the use of a general anæsthetic and the even greater necessity for rapidity in operation and avoidance of meddlesome surgery.

OPHTHALMOLOGY AND OTOTOLOGY.

Under the charge of G. STERLING RYERSON, M.D., L.R.C.S., Edin., Professor of Ophthalmology and Otology Medical Faculty, University of Toronto, and F. C. TREBELCOCK, M.D., C.M., Ophthalmologist, Toronto Western Hospital.

THE TREATMENT OF SOME CHRONIC INFLAMMATIONS OF THE EYE.

The *British Medical Journal*, of July 24, 1909, contains a column from Dr. Wood, of Shrewsbury, upon the treatment of chronic inflammatory conditions in the eye, which is of real interest. It is a kindly criticism of a scheme of treatment elaborated by Burnham, of Toronto, some years ago, Mercury and Iodide with profound and prolonged pilocarpin diaphoresis; a scheme which was called by him, somewhat ambiguously, the Combined Treatment.

We take it that the majority of men who have tried this method in cases where specific treatment, so-called, has been of no avail have gained the same ends as has Dr. Wood; all that could be desired in some and nothing at all in others. Unfortunately, in nearly all cases there has followed a profound general depression which has sometimes antagonized the patient and often been a source of great anxiety to the physician.

We have not implied that the seriousness of the eye condition does not occasionally warrant the taking of great risks, especially in sympathetic ophthalmia. However, in a series of Wood's cases the diaphoresis was induced by external applications of guaiacol instead of hypodermic injections of pilocarpin, and he gives his results as (1) a surer diaphoresis, (2) absence of subsequent depression. His method is as follows:—The ordinary alternative mixtures by the mouth; the patient put between

blankets with two hot water bottles beside him; then one drachm of a mixture of equal parts of guaiacol and olive oil smeared in the axilla or over the epigastrium, covered with oiled silk and absorbent cotton. Hot drinks being given, sweating starts in about one hour and lasts profusely for five or more. This is repeated daily for ten days, then follows an interval, as proposed by Burnham.

This use of guaiacol as a diaphoretic was criticised by Dr. Green, of Lincoln, in the *British Medical Journal*, of August 14, 1909, when he wrote that he had seen the drug used as advised by Wood to reduce hyperpyrexia in acute rheumatic fever and typhoid by diaphoresis, with such marked depression following that it had been discontinued for safety's sake. As an argument against its use in eye-inflammations we cannot think this point is well taken, for in these we do not ordinarily have the endo—and myocardial involvement which is almost the rule in the acute infections, and must have some causative relationship to any depression noticed in their course.

The cases, wherein this method has produced results, includes some of sympathetic ophthalmia, chronic irido-cyclitis, vitreous opacities, optic neuritis and interstitial keratitis.

The impression is general that the profuse diaphoresis in an indirect way, accelerates and intensifies the therapeutic action of the standard anti-syphilitic alteratives.

RODDICK BILL.

BILL No. 11, 1902, OR THE RODDICK BILL.

An Act to provide for the establishment of a Medical Council in Canada.

His Majesty, and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:—

1. This Act may be cited as "The Canada Medical Act, 1902."

2. In this Act, unless the context otherwise requires:—

(a) The expression "medicine" shall be held to include surgery and obstetrics, and to exclude veterinary surgery, and the expression "medical" shall be held to include "surgical" and "obstetrical;"

(b) The expression "Provincial medical council" includes "Provincial medical board" and "College of Physicians and Surgeons;"

(c) The expression "medical school" includes any institution where-in medicine is taught;

(d) The expression "students" means only persons admitted to the study of medicine in virtue of Provincial laws.

3. The persons from time to time appointed or elected, or otherwise being, under the provisions of this Act, members of The Medical Council of Canada, are hereby constituted a corporation under the name of "The Medical Council of Canada," hereinafter called "the Council."

4. The purposes of the Council shall be to promote and effect—

(a) The establishment of a qualification in medicine, such that the holders thereof shall be acceptable and empowered to practice in all the Provinces of Canada;

(b) The establishment of a register for Canada of medical practitioners and the publication and revision from time to time of such register;

(c) The determination and fixing of the qualifications and conditions necessary for registration, including the courses of study to be pursued by students, the examinations to be undergone, and generally the requisites for registration;

(d) The establishment and maintenance of a board of examiners for examination and for the granting of certificates of qualification;

(e) The establishment of such a status of the medical profession in Canada as shall ensure recognition thereof in the United Kingdom, and enable Canadian practitioners to acquire the right to registration under the Acts of the Imperial Parliament known as the "Medical Acts;"

(f) The enactment, with the consent and at the instance of the medical councils of the various Provinces of Canada, of such Provincial legislation as is necessary to supplement the provisions of this Act and to effect the foregoing purposes.

5. The Council may acquire and hold such real estate and personal property as is necessary or expedient for the purposes of the Council or of providing a revenue therefor, and may sell, lease or otherwise dispose thereof; but the annual value of the real estate owned by the Council and held for the purposes of revenue only shall not at any time exceed the sum of twenty-five thousand dollars.

6. The Council shall be composed of—

(a) One member from each Province, who shall be appointed by the Governor in Council;

(b) Members representing each Province, their number being fixed in each case according to the number of practitioners registered under the law of the Province, in the following proportions:—

For the first 100, or fraction thereofOne.

For the second 100, or fraction thereof over one-half...One.

After the first 200, for each succeeding 600, or fraction thereof over one-halfOne.

the elected members representing each province shall be elected—one by the Provincial Medical Council, and the others by the duly registered medical practitioners having received a license or certificate of registration within the province under regulations to be made in that behalf by the Provincial Medical Council; provided that it shall not be competent to any Provincial Medical Council, or the regular practitioners of any Province, to elect any person as a member of the Council who is in any wise connected with the teaching staff or governing board of any university or incorporated medical school which is under the provisions of this Act entitled to elect a member of the council, nor shall it be competent to them to so elect any person belonging to any such particular and distinct school of practice of medicine as is mentioned and intended by paragraph (d) of this subsection;

(c) One member from each university or from any incorporated medical college or school in Canada having an arrangement with a university for the conferring of degrees on its graduates, engaged in the active teaching of medicine, who shall be elected by the university or by such college or school under such regulations as may appertain;

(d) Three members, who shall be elected by such practitioners in Canada as, by the law of the Province wherein they practise, are now recognized as forming a particular and distinct school of practice of medicine, and, as such, are by the said law entitled to practice in the Province.

2. No one shall be a member of the Council unless he—

(a) Resides in the Province for which he is an appointed or elected member;

(b) Is a duly registered member of the medical profession according to the law of the Province which he represents;

(c) Is duly registered as a medical practitioner in the register established under the provisions of this Act; but this qualification shall not be required of any of the members originally composing the Council.

3. No Province shall be represented upon the Council either by appointed or elected members until the Legislature of the Province has enacted in effect that registration by the Council shall be accepted as equivalent to registration for the like purpose under the laws of the Province; and when all the Provinces shall have legislated in effect as aforesaid, it shall be lawful to appoint and elect in the manner aforesaid the members of the Council: Provided, however, that if any of said legislatures afterwards repeals its legislation contemplated by this section, no more persons shall be given the right to practice medicine within the jurisdiction of such legislature, by reason of their qualification or registration under this Act.

7. The term of office for appointed members shall be four years.
2. Members elected by Provincial Medical Councils shall remain in office during the term of office of the members of the medical council of the Province for which they are elected.
3. All other members shall be elected for four years.
4. Any member may at any time tender his resignation by written notice thereof to the president or to the secretary of the Council. Upon the acceptance of such resignation by the Council, the Council shall forthwith give notice in writing thereof, in case of an appointed member to the Secretary of State of Canada, and, in case of an elected member, to the secretary of the medical council for the Province, or to any university, incorporated medical school or college or to the president or the secretary of any recognized distinct school of practice of medicine represented, which such member represents.
5. Any person who is or has been a member may, if properly qualified, be re-appointed or re-elected; but no person shall at one time serve as a member in more than one capacity.
6. In the case of members of the Council whose term of office is about to expire, successors may be appointed or elected at any time within three months before the expiration of such term; provided that where any vacancy exists in the membership of the Council by reason of any term of office having expired, or otherwise, such vacancy may be filled at any time.
7. If there has been a failure to elect a member of the Council, or to elect a properly qualified member, or to cause the name of the member elected to be certified to the secretary of the Council within a reasonable time after such election might have been made, then, after notice from the Council, requiring the Provincial medical council, or the incorporated medical school or college or university, or the recognized distinct school of practice of medicine, to cause such election to be made and to certify the result thereof to the Council within one month from the date of service of such notice, the Council may, in case the default continues, itself elect such member.
8. A member appointed or elected to fill a vacancy caused by death or resignation shall hold office in all respects as the person in whose place he is appointed or elected would have held office, and for the remainder of the term for which that person was appointed or elected.
9. All members appointed or elected shall continue in office until their successors are appointed or elected, or until the expiration of their term of office: if their successors are appointed before the expiration of such term of office.
8. The Council may from time to time—

(a) Elect from among its members a president, a vice-president and an executive committee;

(b) Appoint a registrar, who may also, if deemed expedient, act as secretary and treasurer;

(c) Appoint or engage such other officers and employees as the Council deems necessary to carry out the objects and provisions of this Act;

(d) Require and take from the registrar, or from any other officer or employee, such security for the due performance of his duty as the Council deems necessary.

(e) Fix the allowances or remuneration to be paid to the president, vice-president, members, officers and employees of the Council.

9. The Council shall hold its first meeting at the city of Ottawa, at such time and place as is appointed by the Minister of Agriculture; and, thereafter, an annual meeting of the Council shall be held at such a time and place as is from time to time appointed by the Council.

2. Until otherwise provided by regulation of the Council, twenty-one members of the Council shall form a quorum, and all acts of the Council shall be decided by a majority of the members present.

10. The Council may make regulations not contrary to law or to the provisions of this Act, for or with reference to—

(a) The purposes mentioned in paragraphs (a), (b), (c), (d), and (e) of sec 4 and in section 8 of this Act;

(b) The direction, conduct and management of the Council, and of its property;

(c) The summoning and holding of the meetings of the Council, the times and places where such meetings are to be held, the conduct of business thereat, and the number of members necessary to constitute a quorum;

(d) The powers and duties of the president and vice-president, and the selection of substitutes for them if unable to act for any cause at any time;

(e) The tenure of office, and the powers and duties of the registrar and other officers and employees;

(f) The election and appointment of an executive committee and of other committees for general and special purposes, the definition of their powers and duties, the summoning and holding of their meetings, and the conduct of business by such committee;

(g) Generally, all fees to be required, paid or taken under this Act;

(h) The establishment, maintenance and effective conduct of examinations for ascertaining whether the candidate possesses the qualifications required; the number, nature, times and modes of such examinations; the appointment of examiners; the terms upon which matricula-

tion and other certificates from universities, schools and other medical institutions shall be received as evidence of qualification; the dispensation of candidates from undergoing examinations, either wholly or partially; and generally all matters incident to such examination or necessary or expedient to effect the objects thereof:

Provided, however, that—

- (i) The requirements of any curriculum established by the Council, shall not, at any time, be lower than the requirements of the most comprehensive curriculum then established for the like purpose in any Province;
- (ii) The standard of examination shall not, at any time, be lower than the highest standard for the like purpose then established for ascertaining the qualification for registration in any Province;
- (iii) The possession of a Canadian university degree alone, or of a certificate of Provincial registration founded on such possession, obtained subsequent to the passing of this Act shall have become operative, as provided in subsection 3 of section 6 hereof:—Provided that no retroactive effect shall be given to this Act, and especially as regards persons duly inscribed as students under the laws of any of the Provinces of Canada at the time it shall become operative as aforesaid.

(i) The recognition of licenses granted by any British, Canadian, colonial or foreign licensing body or authority; the arranging and bringing into effect of any schemes of reciprocity as to registration with any British, colonial or foreign medical licensing body or authority; the terms and conditions upon which, and the circumstances under which, medical practitioners shall be entitled to registration under this Act in cases where such medical practitioners are duly registered or licensed under the Medical Acts of the United Kingdom, or under the laws of any British possession other than Canada, or under the laws of any foreign country, which British possession or foreign country extends reciprocal advantages to Canada;

(j) Generally, all matters which it is necessary or expedient to provide for or regulate in pursuance of the purposes of this Act and in furtherance of its general intention. The enrolment and registration of all persons entitled under this Act to appear on the register for Canada of medical practitioners.

2. No regulation made under the authority of this section shall have effect until approved by the Governor in Council, and such approval shall be conclusive evidence that the regulation has no retroactive effect.

11. A copy of any such regulation certified by the registrar or secretary under his hand and the seal of the Council, may be received in

evidence in any court of justice without proof other than the production of a copy purporting to be so certified.

12. The Council shall enact such regulations as shall secure to practitioners who, under the laws of any Province, are now recognized as forming a particular school in the practice of medicine, and to all applicants for registration who desire to be practitioners of such school, rights and privileges not less than those now possessed by them under the laws of any Province, and under the regulations of any Provincial medical council.

13. At each annual meeting of the Council, the Council shall appoint a board of examiners, to be known as "The Medical Council of Canada Examination Board," whose duty it shall be to hold the examinations prescribed by the Council, subject to the provision of section 12 of this Act.

2. The members of the board of examiners shall be eligible for re-appointment.

14. The subjects of examination shall be decided by the Council, and candidates for examination may elect to be examined in the English or French language; and the examinations shall be held only at those centres at which there is a university or college actively engaged in the teaching of medicine and having hospital facilities of not less than one hundred beds.

15. The Council shall cause to be kept by the registrar, under the direction of the Council, a book or register to be known as "The Canadian Medical Register," in which shall be entered, in such manner and with such particulars as the Council directs, the names of all persons who have complied with the requirements of this Act and with the regulations made by the Council respecting registration under this Act, and who apply to the registrar to have their names so entered.

16. Every one who passes the examination prescribed by the Council, and otherwise complies with all the conditions and regulations requisite for registration as prescribed by this Act and by the Council, shall, upon payment of the fees prescribed in that behalf, be entitled to be registered as a medical practitioner.

2. Any person who has received a certificate of registration previous to the passing of this Act and who has been engaged in the active practice of medicine in any one or more Provinces of Canada, shall, after six years from the date of such certificate, be entitled to be registered under this Act as a medical practitioner, without examination, upon payment of the fees and upon compliance with the other conditions and regulations for such cases prescribed by the Council.

3. Any person coming within any of the classes of registered or licensed practitioners to which paragraph (j) of section 10 of this Act

applies shall be entitled to be registered upon complying with the orders and regulations established by the Council in that behalf.

17. Any entry in the register may be cancelled or corrected upon the ground of fraud, accident or mistake.

18. In any case of an application for registration or for correcting or amending any entry upon the register, the applicant, if aggrieved by the decision of the registrar, may appeal to the Council, and the Council shall hear and determine the matter; but all applications to cancel or strike off entries from the register made adversely to the person whose registration it is desired to affect shall be by the registrar referred to the Council, and the Council shall, after three months' notice sent by post, prepaid and registered, to the last known address of such person, who shall have the right to appear by counsel, hear and determine all such applications.

19. If it is made to appear to the Council, after inquiry, that any person registered under this Act has been convicted, either in any part of His Majesty's possessions or elsewhere, of an offence which if committed in Canada would be an indictable offence under "The Criminal Code," 1892, and its amendments, or that he has been guilty of infamous or disgraceful conduct in a professional respect, then, whether such offence has been committed, or such conviction has taken place, or such infamous or disgraceful conduct has occurred, either before or after the passing of this Act, or either before or after the registration of such person, the Council shall, after three months' notice sent by post, prepaid and registered, to the last known address of such person, who shall have the right to appear by counsel, direct the registrar to erase the name of such person from the register: Provided, however, that if a person registered under this Act has likewise been registered under the laws of any Province, and such provincial registration has been cancelled for any of the causes aforesaid by the authority of the medical council for that province, the Council shall then, without further inquiry, direct the registration of such person under this Act to be cancelled.

2. The name of a person shall not be erased under this section—

(a) Because of his adopting or refraining to adopt the practice of any particular theory of medicine or surgery; or

(b) Because of his conviction out of His Majesty's possessions of a political offence against the laws of any foreign country; or

(c) Because of his conviction for any offence which, though coming within the provisions of this section, is, in the opinion of the Council, either from the trivial nature of the offence or from the circumstances in which it was committed, insufficient to disqualify a person from being registered under this Act.

20. Whenever it is made to appear to the Governor in Council that any of the provisions of this Act are not complied with, the Governor in Council may empower the commission of arbitration hereinafter provided for to inquire in a summary way into and report to him whether such is the case and, if so, to prescribe what remedies are necessary, if any.

2. The Governor in Council may require the Medical Council of Canada to adopt the said remedies within such time as he, having regard to the report of the commission, thinks fit to appoint. In default of the Council so doing, he may by Order in Council amend the regulations, or make such provision or order as he deems necessary to give effect to the decision of the commission.

3. The commission of arbitration shall be composed of three members, one to be appointed by the Governor in Council, one by the Medical Council of Canada, and the third by the complainant.

4. The commission may compel the attendance of witnesses and examine them under oath and require the production of books and papers, and shall have such other necessary powers as are conferred upon it by the Governor in Council for the purposes of the inquiry.

21. This Act shall not be interpreted as authorizing the creation of medical schools, or otherwise giving medical tuition.

AMERICAN PROCTOLOGIC SOCIETY.

“BALL'S OPERATION IN THE TREATMENT OF CASES OF PRURITUS ANI WITH REPORT OF A CASE IN WHICH NECROSIS OF THE FLAP OCCURRED.”

By LOUIS J. KROUSE, M.D., of Cincinnati, Ohio.

The case reported was that of a severe intractable case of pruritus ani in a man well advanced in years, who underwent the above operation for pruritus with the result of having the anal flap necrose. He went into the pathology as to the cause of the necrosis and came to the conclusion that the trouble lay in the poor supply of blood to the anal flap. He claimed that there is no anastomosis between the blood-vessels from within the anus and those of the skin. The writer called attention to the fact that Sir Charles Ball's operation has recently been modified so as to prevent sloughing of the anal flap.

A new method of operating was proposed by the author which is somewhat different from that of Sir Charles Ball and of that of Dr. Thos. Chas. Martin, and consists; first, in doing away with the elliptical incision which cuts off the greater part of the circulation from the diseased

area; and secondly, in making six to eight linear incisions through the skin into the subcutaneous connective tissue. These linear incisions, beginning at a point outside of the point of irritation, follow the course of the radii of a circle whose center is the anal canal. The skin lying between the adjacent radii are then undercut until the whole affected area is undermined. Should the dissection be difficult and more room needed, every alternate flap could then be loosened at the anal margin and dissected outwards toward the periphery. After all the adhesions are loosened and the bleeding has been stopped, the parts are again replaced and sutured.

The advantage of this operation over the original one of Ball, lies mainly in the better nourishment of the flap. The blood must come from the circumference and must radiate towards the anal canal.

“A CONSIDERATION OF THE PROPHYLAXIS AND TREATMENT OF CICATRICAL RECTAL STRICTURE.”

By ALOIS B. GRAHAM, A.M., M.D., Indianapolis, Ind.

Opinions were based upon the results obtained in the treatment of fifty-five cases. He stated that prophylaxis implies a careful rectal examination; a careful rectal examination implies an early diagnosis; an early diagnosis implies correct treatment, and correct treatment implies the prevention of a stricture.

When cicatricial rectal stricture is diagnosed, surgical intervention is indicated. In cases where there is no danger of infection, excision should be the choice of all the surgical measures at our command. If successful, its results are ideal because of the fact that it effects a cure by the complete removal of the stricture. In cases where it is not safe to practice the excision method—(and there are many such cases),—complete posterior proctotomy or colostomy, either alone or combined, should be performed. While neither of these surgical measures have effected an authentic cure, yet they undoubtedly can and have effected a symptomatic cure. Gradual dilation should be employed only in cases of small annular stricture. The excision method needs no defence as its results are all that could be desired. As for the other surgical methods, the writer was not at all pessimistic as to the results which can be obtained, if they are followed by correct and systematic after treatment.

“THE USE OF SPINAL ANESTHESIA IN RECTAL SURGERY.”

By COLLIER F. MARTIN, M.D., Philadelphia, Pa.

Who reported 87 cases in which tropacocain and stovains were employed. The technic was given in detail. The method is not recommended where the hips of the patient have to be elevated.

Of the 87 cases; 57 were either frankly tubercular or the condition was suspected; 16 were alcoholics; 4 had anemia, with from 35 to 60 per cent. of hemoglobin; 2 had sepsis; 2 cachexia; 2 were suffering from general debility and old age; 3 had cardiac complications, and one refused to take ether.

The conditions operated upon were as follows: Abscess and fistulæ 54, hemorrhoids, 21, rectal stricture 2, sacral sinus 1, fissure with fistula 2, gangrenous cellulitis 2, anal condylomata 2, rectal carcinoma (perineal excision) 2, and Ball's operation for pruritus ani 1.

The only complications observed were headache 18 times, coming on from 1 to 3 days after operation. Only three cases had severe headache lasting over one or two days. A few cases complained of some stiffness of the back of the neck and shoulders. One patient developed a temporary oculo-motor palsy which recovered under treatment. In two cases spinal fluid was not obtained because of the difficulty in inserting the needle with spinal deformity present.

Spinal anesthesia was selected in cases with pulmonary tuberculosis to avoid the congestion following the use of ether. Alcoholics were also found easier to manage than when ether was used.

Under spinal anesthesia, the sphincters are completely relaxed, there is no muscular spasm and there is an entire absence of the venous engorgement and swelling of the tissues so often seen while the patient is under ether. Bleeding is not as profuse and is more easily controlled, since all parts of the rectal cavity are as accessible as their anatomy will permit. The complete muscular relaxation reduces the traumatism to the tissues.

Spinal anesthesia is at its best when used in operations about the rectum and genito-urinary tract. Careful selection of cases, drugs of uniform strength and purity, and a careful technic will do much to re-establish the confidence of the surgeon in this method of producing anesthesia.

"VAGINAL ANUS IN THE ADULT, WITH REPORT OF TWO CASES."

By LOUIS J. HIRSCHMAN, M.D., Detroit, Mich.

Dr. Hirschman reported two cases of imperforate anus with the anomalous opening occurring in the lower part of the vagina, both occurring in adults. He successfully operated in both cases, restoring the anal outlet to its normal position with a good functional result in both cases. His first case was aged 25, unmarried, and until a few months before examination did not know that she was anatomically different from other young women. She was brought up by a maiden aunt who, while realizing that her charge was not normal, felt that as long as she was having regular bowel movements, she would put off any operative interference until later in life.

The operation in this case consisted in closing the vaginal anal orifice after dissecting the rectum free from the vaginal septum. There being present an infantile sphincter muscle at the normal anal site, an incision was made through the center of this, and by blunt dissection the tissues between it and the blind end of the rectum were separated. The rectum was then pulled down, opened and sutured to the integument. The perineum was not split open nor was the sphincter divided. A good functional result followed.

- His second case was also unmarried, 23 years of age. The case was very similar to Case 1, except that there was an over-development of the sphincter vaginæ which gave her good fecal control. There was present in this case a small fistula connecting the anus and vulva but not communicating with the rectum. In this case the perineum was split and the fistula dissected out. The vaginal anus was dissected free and brought down to the normal anal site in a manner similar to that pursued in Case 1. The perineum was then repaired as in an ordinary perineorrhaphy. The functional result in this case was also good. The author concludes from his experience with these two cases, and realizing the very high mortality from operations for imperforate anus, in infants, that where there is some abnormal outlet for the feces present, it is far better to allow patients to go on in their abnormal condition until they grow old and strong enough for surgical interference and the correction of nature's failure.

"TUBERCULAR FISTULA WITH EXTENSIVE INFILTRATION WITH SPECIMEN EXHIBITED."

By SAMUEL T. EARLE, M.D., Baltimore, Md.

Who reported a case of tubercular ischio-rectal fistula, which on the skin surface, resembled an acute inflammatory condition ready to break down, yet when opened, it proved to be a dense mass of fibrous tissue with only a few tracts of necrotic tissue running through it.

The patient was a policeman, age forty-five; robust and of a ruddy color, weighing 180 pounds; no cough, no history or pulmonary trouble. Patient admitted to hospital, December 29, 1906.

The left buttock very much swollen and inflamed; there were several fistulous openings on its surface, which could not be followed far beneath the skin, and there was one of them that opened just to the right of the anterior commissure, into the anal canal. Upon laying open the buttock between two of the openings, there was exposed a mass of white fibrous tissue that seemed to be encapsulated,—except at points which apparently were necrotic,—which was adherent to the subcutaneous tissue. Supposing it to be a tumor, which had broken down in places, an incision was made, on either side near each lateral border, for the pur-

pose of removing it, which was done. The mass measured 6 x 3 x 2 inches.

It ran down to, and some went between the muscles of the buttock, and in one or two instances involved the same. The tract from the inner margin of the mass, to the opening in the anal canal, was then laid open and packed with gauze. The cavity left was so large that sutures were introduced to draw the edges partially together, and to hold in the packing. These were supplemented by adhesive strips.

After the mass was removed, it was found to be composed principally of fat, with here and there a sinus which was surrounded by dense fibrous tissue from one-quarter to one-half inch thick, and there were found several large larva, supposedly of flies, deep down in the sinues of the growth. The tapering, tail-like process, that extended over the trochanter major, was composed principally of muscle.

Upon microscopical examination, the growth proved to be tubercular. The patient made a slow but complete recovery. The large cavity filled in completely. The patient is now perfectly well and robust.

"FISTULA IN THE POSTERIOR ANAL COMMISSURE."

By J. COLES BRICK, M.D., Philadelphia, Pa.

Who stated that the anatomy of the posterior anal commissure is of such peculiar arrangement that ulcers or fistulas, in this region frequently do not granulate in a proper manner.

The greater part of the external sphincter muscle arises from the coccyx, and after forming the ano-coccygeal body of Symington, passes around the anus, forming a Y-shaped or triangular cul-de-sac at the posterior anal commissure, making this the weakest part of the anal circumference. The levator ani muscle is separated from the coccygeus muscle by a cellular interspace, rendering possible an easy extension of pyogenic organisms.

In ulcerations or small fistulas in the posterior anal commissure, it is the writer's custom to make a triangular incision with the apex toward the anus, rather than an antero-posterior cut. In cases of fissure in this commissure, two incisions, $\frac{1}{8}$ of an inch deep are made into the sphincter muscle on each side of the fissure, all fibrous tissue being removed from the fissure itself.

The physiological action is, that during defecation, the lateral fibers of the sphincter forming the triangular space are at rest, due to their division; thus saving distension of this space, and consequently no interference with healing.

"MODIFIED TECHNIC IN RESECTION OF THE RECTUM."

By J. RAWSON PENNINGTON, M.D., Chicago, Ill.

Numerous illustrations were shown by the author, intended to serve as demonstration designed and employed by himself and Dr. Gronnerud in resection of the rectum in a special case. The growth for which the method was employed extended upward from the upward border of the levator ani muscle for about two and one-half inches.

Aperineoraphy was first done, splitting the recto-vaginal septum back to Douglas Cul de sac. The rectum was then dissected from its lateral and posterior connections upward until it could be pulled downward far enough to effect an end-to-end anastomosis, when the section, including the growth was removed.

The incision was closed with buried catgut sutures, and silkworm-gut for the skin. The posterior vaginal flap covering up, as it did, the operating field, prevents the urine, vaginal and uterine secretions, from coming in contact with the wound.

"ABDOMINAL MASSAGE IN THE TREATMENT OF CHRONIC CONSTIPATION, ETC."

By T. L. HAZZARD, M.D., B.S., Pittsburgh, Pa

The writer referred to the fact that general massage had been practised from very ancient times until the present for the relief of fatigue and for the purpose of increasing the flow of fluids in the blood-vessels, the lymph spaces and juice canals, by which more perfect elimination of wasts is obtained and better assimilation brought about. Two conditions which, in his opinion the relief of will do away with two-thirds of the slight ailments as well as of some of the more serious ones. He began massages for the relief of chronic constipation and was much surprised to find the far reaching, adventitious effects produced. Among others, for example, that the chalky deposit in the joints in articular rheumatism, under careful, patient, persistent manual therapeutics as applied to the bowels, will entirely disappear more often than not.

Mentioned no particular method, saying that any good text-book would give the technic sufficiently well. This manipulation is recommended not only for chronic constipation, but also for the relief of coprostasis for which operation it is very frequently done.

After indicating more of the benefits and some of the dangers of the method, the writer said that if this treatment called for more time than the physician could spare, it had better be left off altogether, although the patient would surely lose a very great benefit. The paper closed with the remark that doubters as to the very great advantages which will accrue to the sick, in many, many ailments, has but to practice careful and intelligent massage to be convinced.

PERSONAL AND NEWS ITEMS.

—
ONTARIO.

Dr. G. S. Young, who practised in Prescott, has located at 280 Roncesvalles Avenue, Toronto.

The specifications for the new wing to the Isolation Hospital, Toronto, are about ready, and tenders for the construction of the building may shortly be called for.

In the County Court, Cobourg, before Judge Benson and a jury, Dr. Stinson of Cobourg was acquitted on a charge of performing a criminal operation.

Prof. Maurice Richardson, of Harvard University, gave an address before the Academy of Medicine at the Biological Building, Toronto University, 7th December. His subject was "The Borderland of Medicine and Surgery."

The City Council of St. Catharines decided to submit a by-law to the ratepayers of the January election to authorize a grant of \$15,000 to the trustees of the General and Marine Hospital towards the erection of a new seventy-five thousand dollar hospital.

Dr. Herbert J. Hamilton, of Toronto, was awarded \$1,800 against the Townsend Livery Company by Mr. Justice Britton as compensation for injuries sustained and loss incurred through a collision between a street car and a coupe of defendant's in which plaintiff was riding.

"Dr. Hawke, 21 Wellesley street, Toronto, makes a specialty of all diseases of the lower bowel. Hemorrhoids (piles) successfully treated without an operation. Write for booklet." A reader in the *Globe* of 8th December, 1909.

By the will of the late Mrs. Alice Inch, of Strathroy, the following charitable bequests were made:—The Town of Strathroy, \$10,000 for the erection of an hospital; St. John's Anglican Church and St. Andrew's Presbyterian Church, Strathroy, \$500 each; the Home for Incurable-, London, \$200.

Kingstonians have contributed \$14,300 towards the Sir Oliver Mowat Memorial Hospital for the treatment of tuberculosis. The cost is expected to be about \$25,000. The building will be reared in hospital grounds facing Lake Ontario. The friends and admirers of the deceased statesman will now be solicited to contribute to the scheme.

One hundred nurses who went to Cobalt when the recent typhoid fever epidemic was at its height have complained to the Provincial Board of Health that they were not properly paid for their services, but as the dispute is between the nurses and the Mine Owners' Association, the department will not interfere.

After fighting against the epidemic of scarlet fever in Wychwood and district for the past six months, Dr. C. A. Warren, of 1309 Bathurst street, Toronto, medical officer for York township, was taken ill with the fever and has had to go to the Isolation Hospital. Dr. J. M. McCormack acted as Medical Health Officer for him.

An effort has been made to establish an Academy of Medicine in Hamilton. The plan is to unite the Library Club and the Medical Society. It has been proposed that the annual fee be \$10. It is expected that a good collection of journals and recent medical publications will be found in the rooms of the new Academy.

Magistrate Denison recently registered a conviction against Robert B. Henderson, an osteopathist, of Toronto, for a breach of the Medical Act. His Worship imposed a fine of \$40 and costs, or 30 days in jail. The evidence was taken in the Police Court sometime ago. The counsel for the defendant stated he would enter an appeal.

Dr. J. Walker, of Glencoe, was bitten on 14th December past, by his dog, which he feared had hydrophobia. He went at once to the Pasteur Institute, New York, for treatment. Nine others from Galt were in the institute undergoing treatment, as the result of bites from a rabid dog in the latter place.

Dr. R. W. Bruce-Smith, provincial inspector of public institutions, was in Hamilton recently and made his first official inspection of the Southam home for advanced consumptive cases. His report has been received and is most favorable. He says the home is an ideal institution of the kind and that there is not the slightest danger to the people residing in the neighborhood of contagion and that their fears on that ground are without foundation.

At the Brantford Hospital Board a short time ago Ald. Ward, who stated that a local doctor had told him there was "unnecessary butchery" at the hospital for no other reason on the part of the doctors than a pecuniary one, was asked to make a specific charge and give the name of his informant in order that an investigation might be held. This he declined to do. The board passed a resolution regretting that the doctors and the hospital had been slandered without evidence.

A short time ago at Massey Hall, Eugene Chafin, who ran as prohibition candidate in the Presidential elections of 1908 in the United States, spoke on the subject next to his heart. The speaker compared the scourge consumption, known as the "Great White Plague," to drunkenness, which he named the "Great Black Plague." In his opening remarks he informed his audience that he was going to assume that the United States and Canada were one and the same countries, and his figures were based on that assumption. He said that 100,000 people were yearly sent to premature graves by the dreadful progress of tuber-

culosis, but on the other hand stated that 150,000 men and women went to the drunkards' grave.

QUEBEC.

Typhoid is getting worse in Montreal, and the cause is thought to be the water, and the situation may become serious. There are 193 cases in five hospitals, and fifty cases are turned away daily.

It is announced at McGill that a wealthy benefactor of the university has promised to give \$150,000 for a new up-to-date gymnasium. The name of the benefactor is withheld, but it is generally believed to be Sir William Macdonald.

It is now 250 years since Jeanne Mance was instrumental in founding the Hotel Dieu, Montreal. In 1659 this young woman saw the need for a hospital and put her vision into concrete form. A beautiful bronze statue has just been erected in her memory and also in memory of those who co-operated with her, namely, Mesdames Maillet, de Bresolles and Maesé. Phillip Herbert was the sculptor.

MARITIME PROVINCES.

Dr. C. S. Morton has returned from Britain, and has decided to remove from Port Greville to Halifax.

Dr. A. I. Mader, who was studying in Edinburgh, took suddenly ill and Mr. Caird had to operate on him.

Dr. E. A. MacIntosh has opened an office in Halifax. For some time he was on the staff of the Nova Scotia Hospital and then took a post-graduate course in London.

Dr. James Ross, of the editorial staff of the *Maritime Medical News*, was recently married to Miss Lillian M. Reeves, formerly head nurse of the Lowell Hospital. All wish Dr. Ross much happiness.

Lieut.-Col. G. L. Foster, Chief Medical Officer of the Maritime Provinces Command, has gone to China for a trip, and Lieut.-Col. Bridges has taken his place.

WESTERN PROVINCES.

A new Catholic Hospital will be built at Prince Albert, Sask., next spring, costing \$100,000. It will have accommodation for one hundred patients.

The commission that was appointed a considerable time ago to report on the management of Manitoba University has failed to agree. Two of the commissioners have reported in favor of a State University and with no denominational ties. Three of the others have made up their

minds to a different course, but the remaining two will not agree upon any form of recommendations. The College of Physicians and Surgeons is willing to hand over to the University its building and library in the event of the University becoming a state institution. The property is worth \$100,000.

FROM ABROAD.

Dr. William Rivers Pollock, for many years obstetric physician and lecturer on midwifery at the Westminster Hospital, died a few weeks ago. He was in his 50th year.

The Public Health Committee of Belfast has decided to ask the local Government Board to put in force the section of the Act calling for milk inspection.

The medical profession of Britain sustained a heavy loss recently by the death of Dr. George J. Cooper, who sat in the House of Commons for a London constituency.

Pediatrics has changed hands and will in future be edited and published by Dr. W. E. Fitch, who for many years edited *Guillard's Southern Medicine*.

Mr. R. Marcus Gunn, senior surgeon to the Royal London Ophthalmic Hospital, and ophthalmic surgeon to the National Hospital for the Paralysed and Epileptic, died 29th November, 1909, after a long illness.

Sir Thomas Smith, F.R.C.S., who had been surgeon to St. Bartholomew's Hospital for so many years, died lately, in his 77th year. He was Hon. Serjeant-surgeon to His Majesty the King.

Bishop Wardlaw recognized the existence of St. Andrews University in 1411. Preparations are being made for the celebration of the five hundredth anniversary of St. Andrews University in 1911.

The Local Government Board for Ireland has issued a careful statement on the prevention of tuberculosis. It aims at preventing the spread of the disease and caring for those now affected.

Otto Beit, brother of the late South African multimillionaire, has increased the latter's bequest of £50,000 to £215,000 to provide fellowships for medical research in memory of his brother.

The Welsh town of Barry has decided to place all the medical practitioners of the town on the local hospital staff. These will take charge of the work in groups of four, and are to be paid £20 annually for looking after the pauper patients. This is a move in the right direction.

The General Medical Council of Great Britain has recommended the government to pass legislation to the effect no one shall administer a general anæsthetic other than regularly qualified medical practitioners, and that all colleges must give proper instructions on this subject.

Mr. Carnegie has extended his Hero Fund to France, because, as he explains, that country was formerly the ally of Scotland and America, and because the three powers—Britain, France, and America—are marching together towards suppressing the worst disaster in the world—man-murdering man in battle.

M. Metchnikoff, before the Academy of Medicine, Paris, gave the results of his studies on infantile diarrhoea. He came to the conclusion that the bacillus proteus is the principal cause. If young chimpanzees are given the stools of children suffering with diarrhoea they also become ill with the disease and their evacuations contain the bacillus proteus.

Women medical students have obtained further recognition by the Royal College of Surgeons. It had already decided to admit them for examinations for college diplomas in January, 1910, and in view of that determination the council agreed to recognize the women's medical schools in London and Edinburgh. It has also approved regulations affording women greater facilities for study in the college museum.

The will of Mr. George Crocker, of New York, which was made public in part by Mr. Eugene D. Hawkins, counsel for the executors, after Mr. Crocker's funeral, provides for a gift to Columbia University that will amount to at least \$1,500,000, to be used for an investigation of cancer, its cause, prevention and cure. It was this disease that caused the death of Mr. Crocker, his wife and his friend and physician, Dr. William T. Bull.

OBITUARY.

W. P. IMRIE, M.D.

Dr. W. P. Imrie died at his home in Yonkers, N.Y., on December 3, as the result of a serious operation. Dr. Imrie was born in Spencer-ville about 50 years ago, and his remains were taken to the family home in that place for burial. Dr. Andrew Imrie, of Detroit, is a brother of the deceased, and Mr. F. Dey, a medical student at the University of Toronto, is a nephew.

COLIN SEWELL, M.D.

Dr. Colin C. Sewell, principal medical officer, Quebec district, and one of the oldest and best known physicians in the city of Quebec, died at his home very suddenly on 1st December, 1909. During his life he was one of the most prominent followers of racing in Eastern Canada, and at one time kept a string of fast horses.

NEIL MCKINNON, M.D.

Dr. Neil McKinnon died at Alpena, Mich., on 12th December last, after a brief illness from Bright's disease. He was the son of Neil and Grace McKinnon, of Strathroy, and a nephew of Dr. A. McTaggart, of Toronto, and was born in 1872. He graduated as M.D. from McGill University, Montreal, in 1895. The funeral took place at Strathroy.

H. C. WILSON, M.D.

Dr. H. C. Wilson, of Edmonton, first Speaker of the Territorial Legislature, who died on 17th December, 1909, practised medicine there since 1882. He was a native of Picton, Ontario, and after settling in Edmonton became one of the most popular citizens of the west. He defeated Hon. Frank Oliver in the election of 1885 for the Legislature. He was also Mayor of the city for many years.

WILLIAM COCKBURN, M.D.

Dr. W. Cockburn died at his home in Oshawa suddenly on 27th October, 1909. He was a graduate of Victoria University and enjoyed the confidence of a wide circle of friends. The doctor was in his 72nd year.

P. S. COTE, M.D.

Dr. P. S. Cote, of Montreal, died on 23rd December last. He was much distinguished for his efforts in philanthropic affairs. He always gave his services free to the poor and was a very generous giver as well. He ordered that his body be cremated. At his special request there were no religious ceremonies in connection with his obsequies.

BOOK REVIEWS.

HIRST'S TEXT-BOOK OF OBSTETRICS.

A Text-Book of Obstetrics, including Related Gynæcologic Operations. By Barton Cooke Hirst, M.D., Professor of Obstetrics in the University of Pennsylvania. Sixth Revised Edition. Octavo of 992 pages, with 847 illustrations, 43 of them in colors. Philadelphia and London: W. B. Saunders Company, 1909. Cloth, \$5.00 net; Half Morocco, \$6.50 net. W. B. Saunders Company, Philadelphia and London. Canadian agents The J. F. Hartz Co., Ltd., Toronto.

In the preface to this edition we are informed that the work has been thoroughly revised. Extensive additions have been made to the book, especially in the section on operations. This work includes the gynæcological operations that are related to obstetrics. To the general practitioner obstetrics is a very important section of his practice. It is here that he often makes his warmest friends, or may make a life-long enemy. The study of the care and management of the pregnant woman and the proper handling of her confinement are very important duties. In this book by Professor Hirst all that one should know can be found. The work is got up in very fine form.

HARE ON TYPHOID FEVER AND EXANTHEMATA.

The Medical Complications, Accidents and Sequels of Typhoid Fever and the Other Exanthemata. By H. A. Hare, M.D., B.Sc., Professor of Therapeutics in the Jefferson Medical College and Physician to the Jefferson College Hospital, Philadelphia, and E. J. G. Beardsley, M.D. L.R.C.P., Philadelphia. With a special chapter on the Mental Disturbances following Typhoid Fever, by F. X. Dercum, M.D., Professor of Nervous Diseases in the Jefferson Medical College. Second edition, thoroughly revised and much enlarged. Octavo, 398 pages, with 26 engravings and 2 plates. Cloth, \$3.25 net. Lea & Febiger, Philadelphia and New York, 1909.

Every practitioner is necessarily concerned with typhoid, owing to its wide prevalence, its often puzzling symptoms, its many complications, the serious sequelæ, and the mortality, which still remains high, though much reduced from former figures. Of all diseases it is one of the most difficult to describe typically, as it exhibits wide variations, almost protean. Till a physician has mastered its aberrant forms, he does not understand the disease, and is open to disastrous error. Hare's useful book has proved the interest taken in its special subject by the exhaustion of an edition and the call for a new one. In preparing it, Dr. Hare has associated Dr. E. J. G. Beardsley, and the joint authors have effected a most thorough revision, representing all advances to date of issue. A

valuable new feature is found in the addition of the other exanthemata. The literature of this whole great group of diseases is epitomized, and combined with the experience of the authors in private and hospital practice. Thus refreshed and enlarged, this standard guide and reference work is again at the service of the profession. These diseases must ever form a large part of the practice of every busy physician. It would be difficult indeed to imagine a more perfect book on them than this one.

CLINICAL EXAMINATION OF THE URINE AND URINARY DIAGNOSIS.

Clinical Examination of the Urine and Urinary Diagnosis. By J. Bergen Ogden, M.D., Medical Chemist to the Metropolitan Life Insurance Company, New York. Third Edition, revised. Octavo of 427 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1909. Cloth, \$3.00 net. W. B. Saunders Company, Philadelphia and London. Canadian agents The J. F. Hartz Co., Ltd., Toronto.

The making of urinary examinations is almost a daily duty with most practitioners. To have at one's command a work that is modern in every way, and not too bulky, is an acquisition that the busy doctor should prize. There is nothing omitted from this book that one could expect to find in such a volume. It is concise, and yet full and accurate. The methods given are the best known and made as simple as possible. We have examined the contents of this volume very carefully and feel very free to recommend it to all who require a work on urinalysis. The paper, press work and illustrations are excellent.

EXERCISE IN EDUCATION AND MEDICINE.

By R. Tait McKenzie, A.B., M.D., Professor of Physical Education, and Director of the Department, University of Pennsylvania. Octavo of 406 pages, with 346 illustrations. Philadelphia and London: W. B. Saunders Company, 1909. Cloth, \$3.50 net; Half Morocco, \$5.00 net. W. B. Saunders Company, Philadelphia and London. Canadian agents The J. F. Hartz Co., Ltd., Toronto.

There is a vast amount of hazy talk upon the subject of physical culture. It is well, therefore, that one who has given to the questions of physical exercise long and careful study should give us such a readable book. The book is got up in a very attractive form, and for this we have to thank the publishers. The contents are also all that the most exacting could desire. Dr. McKenzie has given those who are interested in physical training and exercise a really valuable manual. We would like to see the work have a very wide circulation—the wider the better.

AMERICAN ILLUSTRATED MEDICAL DICTIONARY.

Dorland's American Illustrated Medical Dictionary. A new and complete dictionary of terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, Nursing, and kindred branches; with new and elaborate tablers and many handsome illustrations. Fifth Revised Edition. By W. A. Newman Dorland, M.D., large octavo of 875 pages, with 2,000 new terms. Philadelphia and London: W. B. Saunders Company, 1909. Flexible leather, \$4.50 net; indexed, \$5.00 net. W. B. Saunders Company, Philadelphia and London. Canadian agents The J. F. Hartz Co., Ltd., Toronto.

This is a first-class dictionary. With it at one's hand he can find the meaning of every term now in use. The definitions are given in clear and succinct style. The illustrations are numerous and good and some in colors. It is a great accomplishment for a medical man to be able to use his terms in a correct manner, and such a dictionary as this may be accepted as a trustworthy standard for meanings, spellings and pronunciations. We prize this work very highly.

 BALLENGER'S TREATISE ON DISEASES OF THE NOSE,
THROAT AND EAR.

A Treatise on Diseases of the Nose, Throat and Ear. By William Lincoln Ballenger, M.D., Professor of Laryngology, Rhinology and Otology in the College of Physicians and Surgeons, Chicago. New (second) edition, thoroughly revised. Octavo, 930 pages, with 491 engravings; mostly original, and 17 colored plates. Cloth, \$5.50 net. Lea & Febiger, Philadelphia and New York, 1909.

This work exhibits the remarkable record of having passed through a large first edition in less than a year. The reasons for such popularity are found in the fact that the book is unique in various ways. The author is broad enough to understand and combine in a single volume this natural group of specialties that have hitherto generally been treated apart, to their detriment; he is ingenious in his operations, and discriminates wisely in giving his readers only the best out of the vast number that have been practiced; he is endlessly diligent in covering the literature, having added to his library for the purpose of this work no less than three thousand articles and monographs, the kind of literature in which advances are always announced, and he adds to all these qualifications the unsparing use of illustrations, mostly original drawings, exhibiting, for instance, the successive step of nearly every accepted operation, so that his readers can study them at leisure. As he says, his work is at once a text-book and atlas of diseases of the nose, throat and ear, and it is equally broad in the classes whom it interests, for it serves alike the student, the general practitioner and the specialist. No wonder,

then, that this combined demand has so soon exhausted the first edition and called for another. As in the original writing so in the revision, the author has spared no effort. Every line has been carefully studied for possible improvement, every real advance in all the subjects included in the title has been incorporated, and the effective series of illustrations has been enriched with one hundred and twenty-five new and original drawings, many of those in the first edition being redrawn where critical inspection showed improvement to be possible. Since the work in its first edition, printed from the manuscript, immediately rose to the foremost place in its literature, it may be safely predicted that this revision, starting with the advantage of a printed book as a basis, will achieve still wider success it is an unrivalled source of practical information. We have examined this work with care and with increasing interest and appreciation as we reviewed its various chapters. The book is not only an excellent one from the standpoint of its contents, but it is a work of art as well.

LEA & FEBIGER'S PRACTITIONERS' VISITING LIST.

The Practitioners' Visiting List for 1910. An invaluable pocket-sized book containing memoranda and data important for every physician, and ruled blanks for recording every detail of practice. The Weekly, Monthly and 30-Patient Perpetual contain 32 pages of data and 160 pages of classified blanks. The 60-Patient Perpetual consists of 256 pages of blanks alone. Each in one wallet-shaped book, bound in flexible leather, with flap and pocket, pencil with rubber, and calendar for two years. Price by mail, postpaid, to any address, \$1.25. Thumb-letter index, 25 cents extra. Descriptive circular showing the several styles sent on request. Lea & Febiger, Publishers, Philadelphia and New York.

Being in its twenty-sixth year of issue, The Practitioners' Visiting List embodies the results of long experience and study devoted to its development and perfection.

It is issued in four styles to meet the requirements of every practitioner: "Weekly," dated for 30 patients; "Monthly," undated for 120 patients per month; "Perpetual," undated, for 30 patients weekly per year, and "60 Patients," undated, for 60 patients weekly per year.

The text portion of The Practitioners' Visiting List for 1910 has been thoroughly revised and brought up to date. It contains among other valuable information a scheme of dentition; tables of weights and measures and comparative scales; instructions for examining the urine; diagnosis table of eruptive fevers; incompatibles, poisons and antidotes; directions for effecting artificial respiration; extensive table doses; an alphabetical table of diseases and their remedies, and directions for ligation of arteries. The record portion contains ruled blanks of various kinds, adapted for noting all details of practice and professional business.

Printed on fine, tough paper suitable for either pen or pencil, and bound with the utmost strength in handsome grained leather, The Practitioners' Visiting List is sold at the lowest price compatible with perfection in every detail.

MEDICAL GYNÆCOLOGY.

By S. Wyllis Bandler, M.D., Adjunct Professor of Diseases of Women, New York Post-Graduate Medical School and Hospital. Second Revised Edition. Octavo of 702 pages, with 150 original illustrations. Philadelphia and London: W. B. Saunders Company, 1909. Cloth, \$5.00 net; Half Morocco, \$6.50 net. W. B. Saunders Company, Philadelphia and London. Canadian agents The J. F. Hartz Co., Ltd., Toronto.

It is but a short time since the first edition of this work appeared. In its present revised form the second edition comes to hand. We congratulate the author on the success of his efforts to give workers in this field a useful text-book. Sound judgment characterizes every important statement throughout the work. It is both modern and conservative, and yet, never afraid to be progressive. Such a book is refreshing as showing how much can be done by wise and proper medical treatment of gynæcological diseases. We have only words of praise for this volume.

HENRY PHIPPS' INSTITUTE REPORT.

Fifth Annual Report of the Henry Phipps' Institute for the Study, Treatment and Prevention of Tuberculosis. February 1, 1907, to February 1, 1908. An account of the General and Special Clinical and Pathological work done by members of the staff at the Institute during the year. Edited by Joseph Walsh, A.M., M.D. Published by the Henry Phipps' Institute, 238 Pine Street, Philadelphia, 1909.

This volume covers a number of very important subjects. Tuberculosis as it affects the various systems of the body is fully discussed and much light thrown upon the disease from the practical workings of the institute. This report maintains the high standard of those of former years. Such information is sure to do good service to the people.

PROGRESSIVE MEDICINE.

A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by H. A. Hare, M.D., and H. L. M. Landis, M.D. Vol. IV., December, 1909. Price, cloth, per year \$9; in heavy paper, \$6. Philadelphia and New York, Lea and Febiger.

This volume contains articles on the digestive tract and allied organs by Dr. David L. Edsall, on Diseases of the Kidneys; by Dr. John Rose, Bradford; on Surgery of the Extremities, Tumors, Joints, etc.,

by Joseph C. Bloodgood; on Genito-urinary Diseases, by W. T. Bilfield, and on Practical Therapeutic Referendum, by H. R. M. Landis. The articles are all good. This volume maintains the high standard attained by the long list of those which have preceded it in the series. These volumes make a splendid collection of medical literature.

CLINICAL STUDIES FOR NURSES.

For Second and Third Year Pupil Nurses. By Charlotte A. Aikens, formerly Superintendent of Columbia Hospital, Pittsury, and of Iowa Methodist Hospital, Des Moines. 12 mo. of 510 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1909. Cloth, \$2.00, net. Canadian Agents, The J. F. Hartz Co., Ltd., Toronto.

The authoress has aimed to produce a book setting forth the leading features of disease in a concise, clear and simple manner. The book is intended for the special use of nurses, and gives all that they should reasonably be expected to know about disease and its recongition. Excellent advice is laid down on the prevention of infectious diseases and on the treatment of disease in general. Such a manual as this in the hands of a conscientious nurse will prove of the utmost value to her, and will enable her to perform her duty to her patients much better than she otherwise could. She will appreciate the doctors' instructions all the better for having had this book.

MISCELLANEOUS.

BERI-BERI.

For a long time it has been rather more than a suspicion that this disease was in some way caused by rice. Many observers have studied this subject carefully. Among these may be mentioned the following from the Federated Malay States' Report:

AN INQUIRY CONCERNING THE ETIOLOGY OF BERI-BERI.

It has long been recognized that the incidence of Beri-Beri is greatest among rice-consuming peoples, and whilst from time to time a possible connection between rice eating and this disease has been suggested, hypotheses based on such suggestions have not met with general acceptance. Indeed, most authorities have deemed them unworthy of serious consideration.

Certain oriental peoples partake of a diet in which rice bulks very largely; meats and fish in relatively small amounts and in time of stress these are still further reduced. In view of this fact some observers have suggested that such people are underfed and that Beri-Beri is the result of proteid or possibly fat starvation.

Believing that the diet issued to the sailors in the Japanese Navy was deficient in proteid, Takaki in 1884 introduced dietetic reforms. These were followed by a remarkable diminution in the number of cases and finally by the disappearance of the disease. Critics of Takaki's work have stated that coincident with the alterations in diet, various sanitary reforms were also carried out and that these latter rather than the dietary changes were responsible for the results obtained.

Eijkman, as the result of experiments on fowls concluded that there exists commonly in rice a poison which produces polyneuritis, and that for this poison or its effects something contained in the pericarp is an antidote.

An investigation based on the results of Eijkman's researches was carried out by Vordermann in 1895 and 1896 in the prisons of Java and Madoera. In this investigation red and white rices were used. The distinction between red and white rice is that in the case of the former only the husk has been removed, whilst in the case of the latter the pericarp, embryo, spermoderm, perisperm and part of the endosperm have been removed. The results indicated that the incidence of Beri-Beri among the prisoners varied directly as the amount of white rice in the diet. Among those on red rice the incidence of Beri-Beri was .01 per mille, among those on a mixture of red rice and white rice 2.4 per mille, and among those on white rice 28 per mille.

Braddon, from observations in the Federated Malay States, has drawn attention to the curious discrepancy in the prevalence of Beri-Beri among the immigrant peoples in these States and the Straits Settlements, the vast majority of cases being met with in Chinese and extremely few among Tamils. He believed that the disease was due to the consumption of stale white rice, the staple article of diet among the Chinese immigrants, and that the Tamils remained free from the disease so long as they consumed only rice prepared in the Indian manner, that is, by par-boiling before husking. A similar immunity from the disease enjoyed by Malays under primitive conditions he believes to be due to the fact that they consume rice prepared from padi newly husked. He has given the names "uncured," "cured" and "fresh" respectively to these forms of rice. This view of the etiology of Beri-Beri constitutes, if correct, an important advance upon any of the hypotheses hitherto formulated which seek for the origin of the disease in food.

Braddon has dealt with the whole question in some detail in a recent publication "The Cause and Prevention of Beri-Beri;" among the conclusions arrived at from an analysis of his own observations and the available statistical evidence are the following:—

(1) "The formation of poison in stale rice is probably due neither to fermentation nor bacteria, but to the growth in it of a special fungus."

(2) "The poison of stale rice has an antecedent in fresh rice. The agent must be therefore some ferment or parasite or epiphyte peculiar to padi."

(3) "The specific fungus of Beri-Beri is like that of toxic rye and lolium probably a parasite affecting the surface of the seed."

(4) "The Beri-Beri producing fungus of rice is probably a surface parasite or epiphyte affecting the seed saprophytically after decortication."

(5) "The Beri-Beri poison is probably an alkaloid which is stable and non-volatile and resembles atropine in some and muscarine in other of its effects."

Dubrueil in a monograph "Le Béri-béri," 1906, gives the result of his observations on the disease in French Indo-China, and concludes that Beri-Beri is due to a pathogenic microbe developing in white rice which has been decorticated for some time. He believes that this pathogenic microbe taken with the rice produces an initial lesion in the alimentary canal, the other lesions characteristic of the disease following. He has not been able to isolate the supposed organism.

Van Dieren in a recent volume "Meelvergiftigingen" calls attention to the points of similarity, clinical and pathological, displayed by Beri-Beri, Pellagra, Lathyrism and Ergotism and concludes that these diseases are forms of grain poisoning.

Numerous micro-organisms have been recorded as occurring in cases of Beri-Beri and by their discoverers have been held to be the causative agents. Satisfactory evidence in support of these claims has not yet been forthcoming. Certain other authorities, while admitting that there is no proof that the disease is bacterial or protozoal in origin hold that the balance of evidence is in favor of such a view.

Rice, although not strictly a bread grain, furnishes daily food for more human beings than any other cereal. It is the chief product in China, Indo-China, Japan, and other oriental countries. In the Federated Malay States and the Straits Settlements the amount of rice grown is not great. Its cultivation is for the most part confined to Malays, and save in Perak and Province Wellesley, the amount grown only suffices for the needs of the cultivators, who store the grain in bins and husk it as required.

To meet the requirements of a large and increasing number of immigrants, for the most part natives of China and India, a very large amount of rice must be imported annually.

Padi, that is the grains of the rice plant, consists of the fruit enclosed in the paleæ which constitute the husk. The fruit possesses a thin pericarp firmly adherent to the seed and either silver-like or varying from dark red to black in color. At the base of the dorsal edge may be seen the embryo lying in a depression. Subjacent to the pericarp are the spermoderm and the perisperm which surrounds the endosperm. The cells in the outer layers of the endosperm are filled with aleurone grains and the central portion of the seed is made up of cells closely packed with starch grains. Fat is practically confined to the outer layer of the seed.

In the preparation of rice from padi the product varies in accordance with the methods employed.

Rice as prepared by Malays.—Malays, who grow padi, employ primitive methods, they pound the grains until the husks are detached and remove them by winnowing. Portions of the pericarp at least, and perhaps all of it are removed; should the pericarp be colored it is almost certain to be wholly removed, especially so in the case of careful housewives, to whom this work is relegated and whose chief desire is to prepare a white rice. The layers subjacent to the pericarp are not interfered with to the same extent as when the grains are milled and polished by machinery.

White Rice.—The imported rice, other than that from India and Sumatra, may be described as white rice and is the kind preferred by the immigrant peoples, other than Tamils, as well as by the Malays resident in towns. In accordance with the market requirements the imported padi is milled either into this rice or parboiled rice.

White rice is the "stale uncured" rice of Braddon and is the variety believed by him to be the source of the causative agent of Beri-Beri.

For the preparation of this form of rice large mills have been established in the places from which the rice is exported, also in Penang and Singapore. In these mills the padi is husked and polished by machinery and since the demand is for a white rice polishing is carried out so thoroughly that in addition to the removal of the husk, pericarp, spermoderm and perisperm, a portion of the endosperm is removed in consequence, the finished product consists almost wholly of cells closely packed with starch grains.

Parboiled Rice.—The Tamil laborer prefers a rice similar to that consumed by him in India and a small amount of such rice is imported from India and Sumatra but as the cost is considerably greater than that of white rice its use is limited to the more wealthy Tamils and to some institutions.

To meet the demand for a similar rice and to supply it at cheaper rates, padi is imported from the Siamese Malay States, Perak, and Province Wellesley and specially prepared in the mills of Penang and Singapore. The padi is placed in large concrete tanks and covered with water in which it is soaked for forty-eight hours or thereabouts. The moist padi is then transferred to lightly covered cylinders through which steam is passed for about five minutes. The padi is thereafter removed to paved courts and dried by exposure to the sun. It is then either stored as padi or milled at once. The milling and polishing process is identical with that employed in the preparation of white rice but the endosperm is not interfered with to the same extent and consequently the aleurone layer is for the most part preserved. In microscopic sections of parboiled rice fragments of the pericarp may be seen.

As compared with similar rices imported from India and Sumatra the local product has a peculiar disagreeable odor which can to some extent be removed by careful washing previous to cooking. The exact cause of this difference has not been determined. These rices are here called parboiled rice (the "cured" rice of Braddon), the grains are of a yellowish color and more or less translucent, it may be that as such rice cannot be made white the polishing is carried to a less degree, or the treatment previous to milling may have rendered the peripheral layers less friable and thus less readily removed by polishing.

Comparison microscopically of the Malay, parboiled and white rices, shows that the latter has been deprived to the greatest extent of its oil-containing and aleurone layers and chemically we have shown that parboiled rice contains relatively much more oil than white rice.

RESULTS AND CONCLUSIONS.

1. In the course of a systematic inquiry especially undertaken to test the position of white rice as a causative agent in Beri-Beri, it was observed that twenty cases of this disease occurred among two hundred and twenty people on white rice who were continuously present in the various parties during the course of the out breaks. In the parties on parboiled rice during the same periods and under similar conditions, among two hundred and seventy-three people no sign of the disease appeared.

2. Since all cases presenting equivocal signs of the disease were excluded we are of opinion that there were many other cases which in the ordinary routine of clinical practice would have been regarded as Beri-Beri. Such cases only occurred among people who consumed white rice, and their inclusion would not strengthen the case for an infectious origin of the disease.

3. No case of Beri-Beri occurred in any person who had been on white rice for a less period than eighty-seven days.

4. Systematic examinations were made of the blood and urine of patients suffering from Beri-Beri. Various methods of examination were employed but in no instance were any organisms found except those well known as the causative agents of other diseases.

5. In the course of the inquiry patients in various stages of Beri-Beri were at times in contact with parties of men on parboiled rice. The results of observations made on such occasions furnished evidence that the disease is not a directly communicable one.

6. Removal of patients suffering from Beri-Beri from one place to another did not influence the progress of the disease and removal of entire parties from the place where the disease had occurred did not influence the progress of the outbreak so long as they continued on white rice. These experiments suggest, although they do not prove that *place per se* or considered as a nidus of infection has no influence upon the development of Beri-Beri.

7. In three instances in which definite outbreaks of Beri-Beri occurred among parties on white rice, substitution of parboiled rice was followed by a cessation of the outbreak.

8. The outbreaks of Beri-Beri cannot be attributed to deficiency in the diet issued, either in respect of proteids, fats, carbohydrates or salts.

9. No evidence was obtained to show that any article of food other than white rice was a possible source of a causative agent of the disease.

10. Ankylostomes and other Nematode worms were not found in a larger proportion of patients suffering from Beri-Beri than in the general population under observation.

11. The general results lend support to the view that the disease Beri-Beri as it occurs in this Peninsula has, if not its origin in, at least an intimate relation with white rice, and justify further research along these lines.

RECIPROCITY WITH BRITAIN AND AMONG THE PROVINCES OF THE DOMINION.

At the recent meeting of the Canadian Medical Association in Winnipeg, two matters of great interest to the profession received marked attention. The first of these was the question of a common Register for the whole Dominion, a question which implies interprovincial reciprocity. As our readers are aware, many attempts have been made to solve the difficulties in the way of securing a Dominion Register. Every one admits that our present system is a bad one, it is clumsy, irritating and unjust. To the ordinary man it must seem preposterous that a medical man who may have practised for years with success in one of the

provinces of our Dominion is considered unfit to undertake practice in another province, until he has passed an examination by the board or council of that province. It must seem unjust that a young man who has passed successfully the examinations of the Universities of McGill, or Toronto, or Dalhousie, or Manitoba, should be excluded from practice in any province, until he has passed the examining board of the province. This unfortunate state of affairs, which is little short of scandalous, is to a large extent the result of the unhappy arrangement whereby under the Act of Confederation, education was left to provincial authority, and not made a federal charge. We all remember the great effort made by our distinguished colleague, Dr. Roddick, of Montreal, to secure a common registration, by means of the Canada Medical Act. This Act, which received the assent of Parliament in May, 1902, provided for the establishment of a "Medical Council of Canada" and among the purposes of the Council, were the establishment of a qualification in medicine which should empower the holder thereof to practice in all the provinces of Canada, and the establishment of a register for Canada of medical practitioners; also for the establishment and maintenance of a board of examiners who should examine and grant certificates of qualification. Now, as the methods and standards of medical education are provincial and not federal in their control, it would be necessary, before the establishment of a Dominion Register, that the legislature of such province should enact that registration by the Council should be accepted as equivalent to registration under the laws of that province. If then, each provincial legislature had so decreed, the Medical Council, representing all the provinces, would have come into being, and a common register would have been established. But all the provinces did not agree to this, and as the Act now stands, it is inoperative "until all the provinces shall have legislated in effect as aforesaid." And so that road is still closed.

But there is another road which may be tried. And this is by means of the amendment secured by General Laurie to the Medical Act of Great Britain. An Act was passed in Britain in 1886 providing for reciprocity between the Mother Country and such self-governing colonies as might comply with certain conditions. This was done expressly to facilitate the admission of medical men from the Colonies to practise in Great Britain, or in the Imperial service. This Act expressly stipulated that if a colony had a provincial and a federal organization, such reciprocal arrangements should be entered into with the federal, not the provincial government. In the case of the then federated state of Australia, reciprocity was arranged for, but, as education is not under federal authority in Canada, reciprocity was denied us. As it was held impossible to amend the "British North America Act" of 1867, General Laurie, then a mem-

ber of the Imperial Parliament, but who has always shown great interest in affairs in this country, brought in a bill to amend the Medical Act, and after several unsuccessful attempts, gained his point, so that now each province, for the purpose of medical registration is regarded as a separate British possession. The Medical Council of Great Britain welcomes this change, and is willing to enter into reciprocity with any of the provinces of Canada whose legislatures pass the necessary enactment, and on the understanding that the provinces so entering into reciprocity with Britain, reciprocate also with each other. In the Province of Nova Scotia the enabling legislation has been passed, and any one on the Medical Register of Nova Scotia may be registered in Britain, and conversely any one on the British register can be registered in Nova Scotia. Thus far Nova Scotia is the only province which has taken advantage of the Laurie amendment. It was understood that the province of Quebec had also complied with the provisions of Imperial reciprocity, but we understand that, while the Medical Council of Quebec receives registered British practitioners, who have been educated in Britain, it refuses to register medical men educated in other Canadian provinces who may have registered in Britain. If this be really their position, they cannot expect reciprocal registration with Britain.

It is at once evident that, under the Laurie amendment as viewed by the Medical Council of Great Britain, the door is automatically open to a Dominion register. For, if each province passes the necessary legislation for reciprocal registration with Great Britain, it *ipso facto* recognizes that each other province is on the same basis, has practically the same standard of medical qualifications, and "things that are equal to the same thing are equal to one another."

But, if one province takes the stand of refusing reciprocity to its sisters in the federation, the way is blocked as before.

The great difficulty in the working of the Roddick Act as it appears to us, lies in its examining board; indeed, the difficulties here seem to us insuperable. And it does not seem possible that any progress can be made until some common platform can be reached, and reciprocal relations established between the various provinces. If, and when that platform is reached, the question is solved, at least as regards Canadian graduates.—Editorial in *Maritime Medical News*, of November.

PREVENTION OF TUBERCULOSIS.

The Toronto League for the Prevention of Tuberculosis has now completed its list of officers. The League is under the patronage of His Honor the Lieutenant-Governor of Ontario and Mrs. Gibson, Sir James

P. Whitney, Mayor Oliver, Archbishop McEvay, Bishop Sweeny, Sir William R. Meredith, Mr. Goldwin Smith and President Falconer.

Its officers are as follows :—Honorary President, Sir William Mortimer Clark, K.C. ; Honorary Vice-Presidents, Senator G. W. Ross, Senator George A. Cox, Senator Robert Jaffray, Hon. George E. Foster, M.P., E. B. Osler, M.P. ; Hon. J. J. Foy, Attorney-General for Ontario ; Hon. R. A. Pyne, Minister of Education for Ontario ; T. R. Whiteside, M.P.P., W. K. McNaught, M.P.P., John Shaw, M.P.P.

President, P. C. Larkin ; Vice-President, Hon. W. A. Charlton, Dr. Charles Sheard, Messrs. Michael McLaughlin and J. E. Atkinson ; Honorary Treasurer, Frank Sanderson ; Secretary, Dr. J. H. Elliott. Chairman of Committees—Executive, Mr. M. McLanghlin ; Finance, Mr. Frank Sanderson ; Educational, Dr. G. D. Porter ; Legislation, Mr. E. V. O'Sullivan ; Statistical, Dr. Charles Hodgetts ; Membership, Mrs. A. M. Huestis ; Relief, Mrs. F. H. Torrington.

General Committee—Drs. McPhedran, J. T. Fotheringham, Harold Parsons, Charles A. Hodgetts, R. W. Bruce Smith, William Oldright, J. N. E. Brown, A. A. Macdonald, F. N. G. Starr, R. A. Reeve, J. A. Amyot, Geo. D. Porter, Rev. Father Minehan, Rabbi Jacobs, Rev. John MacNeil, Messrs. C. S. Gzowski, Frank Sanderson, James Simpson, Henry Sutherland, E. V. O'Sullivan, Thomas Urquhart, Dr. A. R. Gordon, Dr. Allan Adams.

Ladies' Committee—Lady Mortimer Clark, Lady Edgar, Lady Falconbridge, Dr. Melen McMurchy, Mrs. F. H. Torrington, Mrs. C. S. Gzowski, Mrs. Elmore Harris, Mrs. J. N. Shenstone, Mrs. Forsythe-Grant, Mrs. Brodie, Mrs. Boddy, Miss Josephine Hamilton, Miss Neilson, Mrs. Willoughby Cummings, Miss Brent, Mrs. Nordheimer, Mrs. A. M. Huestis.

This League, which is in affiliation with the Canadian Association for the Prevention of Tuberculosis, is largely for the purpose of education. It is the desire of the League to investigate, with co-operation of the Board of Health, the city physicians and the citizens in general, those conditions favoring the spread of the disease, and where possible to help ameliorate them, and to help in the work of education regarding the methods of prevention of this disease.

The Medical Health Officer, through the Board of Control, has assigned the League a room in the City Hall, where from 1 to 2 p.m. each day an official of the League will be in attendance. It is hoped the people in general will avail themselves of this opportunity of putting themselves in touch with those patients suffering with tuberculosis who are not being properly cared for.

An effort will be made to obtain a large membership of the public for this League, which has such a splendid object in view.

With the co-operation of the public the League hopes to succeed in materially reducing the mortality from tuberculosis, as has already been done in other large centres through similar efforts.

RATTLESNAKE VENOM IN CONSUMPTION.

In the current number of *The Journal of Clinical Medicine* the results of a preliminary investigation of rattlesnake venom as a curative agent are given in an article by Dr. Thomas J. Mays, a well-known authority on consumption and medical director of the Philadelphia Clinic for the home treatment of chest and throat diseases. In his article, which is entitled "The Action of Crotalin," Dr. Mays says:—

"The writer's own experimental study of this substance led him to believe that it profoundly affects the cerebro-spinal nervous system, and especially that part of the spinal cord which comprises the respiratory centre and other closely allied functions.

"The cough and expectoration, the two very harassing features in every case of phthisis almost without exception, yield readily to the action of this drug, whether administered subcutaneously or internally, or both. The patient has a decided increase in strength from the very beginning of the treatment. This has been so evident and so constant that it seemed almost anomalous in the absence of an increase in flesh."

CANADIAN MEDICAL ASSOCIATION.

TORONTO, November 15th, 1909.

DEAR DOCTOR:—

The Forty-third Annual Meeting of the Canadian Medical Association will be held in Convocation Hall, University of Toronto, Toronto, Ontario, on the 1st, 2nd, 3rd and 4th of June, 1910. You are invited to be present and take part in the programme.

Information as to Transportation Rates, Provisional Programme, etc., will be sent out in due time.

Arrangements are being completed to make this one of the best meetings in the history of the Association.

Yours very sincerely,

GEORGE ELLIOTT, *General Secretary*,
203 Beverley St., Toronto.

ADAM H. WRIGHT, *President*,
Toronto.

REPORT ON ALCOHOL.

Alcohol and alcoholism are two of the real and substantial enemies of moral, artistic and commercial progress of the human race, according to the report of the United States delegates to the twelfth international congress on alcoholism, made public by the State Department to-day. The delegates were appointed by Secretary Knox as one of his first official acts. The congress was held last July in London, England, and twenty-five Governments were represented, the delegates of each concurring in the general finding that alcohol not only was unnecessary to human life and comfort, but was inimical to both. The drinking habit was condemned as dangerous to public health and morals, and subversive of national, moral, commercial and military greatness.

While the congress urged the necessity of imposing the most rigorous restrictions on the sale and traffic in alcoholic liquors, it regarded as equally important the need of educating the younger generation to a true knowledge of what alcohol is and what its effects upon the human system are. The delegates believe that the numerous recent discoveries as to the harmfulness of drunkenness and even of "moderate" drinking also, should be set before children in order that they may see the danger of the practice.

MEDICAL PREPARATIONS, ETC.

THE McINTOSH BATTERY WALL PLATE.

That extreme complication in electro-therapeutic apparatus has become the order of the day is patent to the merest tyro by a glance at the very elaborate designs shown in the catalogues of many manufacturers of this line of goods. Especially is this true of many wall plates which have been so overburdened with switches that the beginner in electro-therapeutics has often hesitated to install one because of the length of time required to become familiar with manipulation of the mechanical features.

To do away with this objection, the McIntosh Battery and Optical, Co., 27 Washington St., Chicago, have produced a strikingly original design of wall plate which is absolutely without switches, the various modalities being selected by turning a knob to the various varieties of currents plainly indicated on a dial. This practical selector is a marvel of mechanical ingenuity, accomplishing the work of four switches with one movement of the knob. Every feature of the plate is in perfect harmony with the general design; the monomotive rheotome being the simplest and most accurate ever made; while the pole changer indi-

cates both positive and negative poles at the same time—something never heretofore attained with a pole selector. The eleven modalities offered embrace galvanic, faradic and sinusoidal currents in variety and combination including diagnostic lamp currents as well as cautery; the latter obtained from a transformer heretofore found only on most expensive plates. The improved MacLagan wire rheostat with new volt scale and the reliable McIntosh Shunt Meter are also features of this outfit. Full information regarding this most practical innovation can be had by addressing the McIntosh Battery and Optical Co., 227 Washington St., Chicago.

BROMIDIA (BATTLE & COMPANY.)

Of all the many hypnotics at the command of the medical profession there is none that gives as uniform satisfaction under all conditions as Bromidia. As has been previously stated, the sleep produced is of a true physiological character. It is dreamless, and the patient awakes refreshed and vigorous. In proper dosage, Bromidia is perfectly safe and does not depress the heart. A teaspoonful should be given in water, and, if necessary, repeated hourly until four doses have been administered. It is needless to state that, in order that maximum affect may be obtained from the initial dose, the patient should be placed under conditions favorable to the induction of sleep.

WHY USE MORPHIA?

The practice of using morphia for simple pains and neuralgias of different varieties cannot be too strongly condemned. As these preparations afford speedy relief, it is taken for granted without any further consideration, that they are precisely what the condition requires, and patients fly to their use on the slightest provocation without consulting their physicians at all. Such persons, long before they recognize the fact, learn to rely unconsciously upon morphia for relief, without realizing that they thus slowly drift under its pernicious influence, and in a short time absolutely require the drug independently of the original condition which induced its use.

In almost all the cases of pain, except, perhaps, those of the gravest surgical character, the exhibition of one of the approved derivatives of the coal tar series will be found amply sufficient in its anodyne and analgesic character to obtund all of the pain symptoms. Indeed, it is a matter of record that in the celebrated case of Barry, treated by Dr. A. V. L. Brokaw, Professor of Anatomy and Surgery, Missouri Medical College,

and Surgeon to St. John's Hospital, where a thoracic wound thirteen and a half inches in length, penetrating the lung cavity was the feature, antikamnia tablets were used for the relief of pain, and it is now becoming quite a proposition with the profession as to whether morphia is not to be driven almost entirely from the field, in the broad general sense which has so long marked its use.

GASTRO-INTESTINAL AILMENTS OF YOUNG CHILDREN.

By H. B. BROWN, M.D., Waukegan, Ill.

As the hot weather approaches the usual number of cases of gastro-intestinal ailments will confront us, and if we be not alert the same mortality of old will occur among our little patients of one and two years. The keynote to success in the management of these cases is to see that correct feeding is enforced and to keep the alimentary canal as clean and nearly aseptic as is possible. If this be done much suffering can be obviated and many little lives saved.

Every medical man these days is capable of giving correct advice on infant feeding, the care of bottles, accessories, etc., if he will only take the time and trouble to make the mother understand how important it all is. The doctor's suggestions on this matter are too often regarded as simply platitudes and not thought of seriously until the child is in the throes of a severe illness. The following clinical reports are illustrations of my usual method of handling the more common but serious gastro-intestinal diseases we meet during the heated season.

Ethel G., aged ten months, suffering from cholera infantum; bottle fed. Was passing watery stools every few minutes. Temperature had been considerably elevated, but was now slightly abnormal. Mouth and tongue parched. Considerable emaciation and scaphoid abdomen. Circulation weak and respirations labored. In fact an extreme prostrate condition. Treatment: I put four ounces of Glyco-Thymoline with eight ounces of water and gave it as a high enema, causing it to be retained as long as possible. This was repeated every hour or so until the bowels were thoroughly cleansed and the stools diminishing in number. Gave one-tenth grain of calomel every two hours until the discharges showed the characteristic greenish color. Also gave the following:

R	Elixir Lactopeptine	3 ij
	Glyco-Thymoline	3 ij
	Oil Peppermint	gtt. j

M. Sig.—20 drops every hour. After eight hours the child was able to take nourishment and retain it. This consisted of cold pasteurized milk diluted with an equal portion of lime water. Child was given

all the cold water and lemonade she wanted. She made a good recovery.

Jennie M., aged fourteen months. Suffered from gastro-enteritis with much fermentation. Bowels swollen and tympanitic. Fever of a remittent type due to autotoxemia. Child delicate and poorly nourished; still nursing the mother's breast. Mother herself in poor health and in no condition to nourish her child. Treatment: Put the little one on cow's milk diluted with lime water. Three times a week I gave a high enema of a warm saline solution and Glyco-Thymoline, equal parts. Also gave the above prescription, a teaspoonful every four hours. Child steadily improved under this treatment and in six weeks was in a good state of nutrition and health.

A point that I wish to emphasize in these notes is that Glyco-Thymoline is a most excellent antacid and antiseptic and deserves special consideration in the stomach and bowel disorders of young children. It gives prompt and gratifying results.—*Medical Summary*, July, 1907.

THE "PERSONALLY CONDUCTED" SCHOOL GIRL.

In a recent issue of one of our prominent medical journals appeared an article from the pen of a well-known pediatricist, entitled "The Personally Conducted Baby." While the importance of a sedulous and careful attention to the needs of the growing infant cannot be overestimated, it is equally important that the physical requirements of the adolescent school girl should be carefully looked after during the impressionable and formative period of life incident to the initiation of the menstrual epoch, "The Personally Conducted School Girl" is more likely to successfully weather the stress and strain of the modern educational system than one who is not so carefully guarded. Regularity and system are the essential requisites of success. Hurried and irregular meals, the eating of an undue amount of pickles and condiments, too frequent indulgence in candies and sweets, should not be allowed. Habitual constipation should not be allowed to continue, and sufficient exercise in the open air should be insisted upon. The bedroom window should always be freely opened at night, and late hours and exciting entertainments should be avoided. In spite of all hygienic precautions, however, the school girl is likely to become more or less chlor-anemic. In such cases the irritant forms of iron are worse than useless, because of their disturbing effect upon digestion and their constipating action. Pepto-Mangan (Gude) is free from these disadvantages and can be given as long as necessary without producing intolerance or gastro-intestinal derangement. Periodical blood examinations will evidence the prompt and progressive increase of red cells and hemoglobin, and the gradual return of color will show the general improvement of the patient.