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EDITORIAL.

CONDITIONS OF PRACTICE IN CANADA.

That there are many conditions to be found in the various provinces of the Dominion that are irksome, and, indeed, very unjust, there can be no doubt. Each province fixes its own standard for those who wish to practise medicine in it. This has led to a variety of standards and methods of graduation.

We have always taken the position that, so far as medical practice is concerned, Canada should be one and an undivided country. We published the Roddick bill as soon as it had received the royal assent, in 1902, and on many occasions we have urged that all the provinces fall into line. We have some time ago published in our pages the proposed amendments to the Canada Medical Act that are before the Federal Parliament. We have often urged that all opposition be dropped in order that these amendments may become law.

Quite recently serious opposition arose on the part of the medical men of Saskatchewan. They objected to the universities having representation on the Dominion Medical Council. On this point we think that such representation would be a good thing. These representatives would be men who would have knowledge on the matter of teaching and the formation of a curriculum of study. The teaching bodies are represented on the General Medical Council of Great Britain. We think they should have representation in this country.

The difficulty of the Western Provinces regarding university representation has been overcome by the special committee of the Commons dealing with the bill. The committee has amended the bill by providing that two of the three members of the council to be appointed by the Governor-General-in-Council shall be chosen from Saskatchewan, Alberta, and British Columbia, in which provinces there are, as yet, no medical college.

There is no medical college in either New Brunswick or Prince Edward Island. As New Brunswick is the largest of these, we think the third Government member should be chosen from it. The Provinces of Manitoba, Ontario, Quebec, and Nova Scotia will have college representations, as well as provincial ones.

The representation for the provinces would stand somewhat as follows:

British Columbia, Alberta, and Saskatchewan, two from each province and two Government members.

Manitoba would have two for the province and one from the medical college.

Ontario would be represented by two provincial and three college members.

Quebec would be entitled to two from the province and two, perhaps three, college representatives if the Laval College at Quebec city should be able to qualify.

New Brunswick would have two from the province and, we think, one of the three appointed by the Government, as this would tend to even up matters between the Maritime Provinces and the Western Provinces.

Nova Scotia would be entitled to two provincial and one college representative.

Prince Edward Island would have two provincial representatives.

In addition to these there will be three homœopathic representatives, but only one of these from any one province.

The Dominion Medical Council will, therefore, be composed of three Government members, three homœopathic members, seven college members, and eighteen provincial members.

It is quite clear that this is the only possible way of securing inter-provincial registration. The provinces have been slow to act on their own account.

To meet the difficulty to some extent the bill of General Laurie was passed in Britain in 1906. This made it possible for any province to reciprocate with Britain, and, as a consequence, with each other. Had all the provinces of the Dominion approved of this measure, they would have secured reciprocity with each other by way of the British route. So far only Nova Scotia, Prince Edward Island, and Quebec have put this law in operation. It does not seem as if this method of inter-provincial reciprocity would become popular, and the chances of the medical standards of one province being accepted by the other province, through the General Laurie bill in Britain of 1906, are very remote.

Further, the provinces have been very slow—indeed, have appeared to be unwilling—to enter into terms of reciprocity with each other whereby their qualifications would be accepted mutually by each other. This would seem easy, and yet, through jealousies, nothing has been done. The various provinces could have appointed commissioners to have gone into this matter, and when a common basis of medical education had been settled upon, the provinces could then have agreed to

accept the licenses of each other. But this appeared too easy and too fair, and so it has never been taken up.

We must, therefore, fall back upon the Canada Medical Act of 1902, known as the Roddick bill. We urge that the medical profession of all the provinces fall into line and give their support to the amendments now before Parliament. This bill would open up a common portal to practise in any province. Should anyone wish to remain in his own province and qualify for practice in it only, he could do so, and need not avail himself of the Dominion standard. This would be optional and not compulsory. To such an arrangement one cannot see any objection. We ought to have a common national standard, and the one now proposed appears to be the only way. Let us remember the words of Longfellow in his "Hiawatha":

All your strength is in your union,
All your danger is in discord;
Therefore be at peace henceforward,
And as brothers live together.

Since writing the foregoing, word appeared in the press that the bill will become law. We give it, as passed by the House of Commons, in another portion of this issue.

THE COST OF TUBERCULOSIS TO CANADA.

We have often pointed out that the loss in money due to the deaths and sickness from tuberculosis is a very large sum. Professor Walter F. Wilcox, of Cornell University, who has paid a very great deal of attention to the mathematical side of this question, places the value of each life lost by this disease in the State of New York at \$3,828. The Committee of One Hundred which reported so fully on United States vital statistics, places the value of all lives lost at \$1,735. In this calculation there are children and the aged, who have a negative value.

In the case of tuberculosis, most of the deaths occur in early manhood and womanhood, and, therefore, the value of each life lost is said to be \$3,828. In Canada there are about 12,000 deaths annually from tuberculosis. Putting the number at 10,000, the loss caused by deaths from this disease would be \$38,280,000, granting that lives in Canada have as high a value as in the State of New York.

There are about 40,000 always ill with the disease. This means a heavy loss in time and medical attendance. It would not be too much to put this at \$100 for each. This would give about \$4,000,000 more

to be added to the loss to the country due to this disease. We have, then, a grand total of at least \$42,000,000 as the loss caused by tuberculosis.

It is to lessen this loss that we make our appeal to the Federal and Provincial Governments to do something substantial for the public weal. A grant of, say, \$1,000,000 a year in aid of efforts to prevent and cure would do a vast amount of good, and would yield a splendid return on the outlay.

PUBLIC SCHOOL MEDICAL INSPECTION.

When new undertakings come into operation there is usually a flourish of trumpets. The inspection of the public schools in Toronto proved no exception to this general rule. Within a few days after the appointment of the medical inspectors the lay press began to contain reading items about the large number of children who were found to be diseased.

In one of these reading items the public was informed that there were so many children in need of medical and surgical treatment that the hospital could not take any more till 1st April, and that the dental college could not handle any more cases of bad teeth until 1st September.

We have been looking into this subject somewhat, and feel disposed to state that there is too much of the alarmist cry in some of what is reaching the public through the press. We hope this will speedily cease, and that the medical inspection will go on as a matter of routine through the proper channels.

We have heard of instances where an attempt has been made to induce patients to go to certain parties for treatment. This must not be tolerated for a single moment. The destitute poor child should be sent to some institution; but all others should be sent to their own family physician. He is the one who should advise as to where and by whom the child should be treated.

The moment the inspectors interfere with the family rights in having their children treated by their own choice, or in trying to secure practice for themselves or their specialist friends, that moment public confidence and the good-will of the medical profession will be lost.

We have nothing but good words to say for the principle of medical inspection of schools. We believe that the money so used will be well spent, but there must be no interference with the freedom of choice by the children and the parents of the physicians or surgeons who shall take care of the cases. Care must be taken that the charities be not taxed with the cure of those who are able to pay.

THE MILK BILL FOR ONTARIO.

The Ontario Government has passed a milk bill regulating the standard and sale of milk. The bill fixes a minimum food value for milk, and leaves it with the various municipalities to place the standard higher.

The sanitary regulations governing the sale of milk are left to the municipalities to determine. As these may have to vary a good deal, it was thought that on the sanitation of the milk some latitude must be allowed.

On the whole, the regulations contained in the bill will do much good.

CARE FOR WEAK-MINDED CHILDREN.

Dr. Pyne, Minister of Education for Ontario, is to be congratulated upon the provisions of his bill for the care of weak-minded children in schools. The bill provides, among other things, for the establishment of special classes for such cases. Children are to be admitted to such classes on the report of the principal of the school and the medical inspector.

School boards are authorized to provide for medical inspection by a duly qualified medical practitioner attending special classes, and, upon the recommendation of the medical inspector, may provide for medical treatment being given to any child who needs it and whose parents are unable, from poverty or other cause, to provide adequately for the treatment of the child. The medical inspector, in the course of his work, is to visit the children in their homes and consult and advise with the parents as to the treatment of the children in their homes and the conditions which will best enable the children to attain a normal degree of intelligence and education.

Grants are to be apportioned among the different classes by the Minister.

The tendency of the times is to conserve the health of the people. On the ground that prevention is better than cure, these efforts should meet with general support.

THE VICTORIAN ORDER OF NURSES IN CANADA.

When Her Excellency Lady Aberdeen inaugurated the Victorian Order of Nurses there was considerable opposition to the scheme. It was contended that it was not necessary to form such an organization,

and that it would interfere with the work of other nurses who had to earn a living by their professional work.

These fears have "vanished into air, into thin air," like old man Prospero's vision. The Victorian Order of Nurses has done a great work in this country since its establishment. In many districts where no other nursing would be possible the order has sent nurses, who have rendered the very best form of services to the public. We hear nothing now of these nurses interfering with the work or the income of other nurses.

The annual report this year was an encouraging one. The meeting was held at Government House, Ottawa. Three new branches had been established during the year. These were at Victoria and Chase, B.C., and at Cobalt, Ont. It was shown in the report that much district nursing had been done in Vancouver, Revelstoke, Winnipeg, Toronto, Montreal, and Ottawa.

We can commend the claims of the Victorian Order of Nurses to the sympathy of the people of this country. Like every movement of this kind, money is required to carry on the good work. Those who can afford to give should place this order on their list of objects which they should support. We publish the list of officers, and specially direct attention to the names of the treasurers, both of whom reside in Ottawa:

Patron, Earl Grey; honorary president, J. M. Courtney; honorary vice-presidents, Hon. George A. Cox, Dr. T. G. Roddick, and Mr. George Burn; honorary treasurers, Messrs. George Burn and John Fraser; honorary secretaries, Dr. Thomas Gibson and John F. Orde. William Thoburn, M.P., replaces the late Mr. Bennet, Rosamond, on the executive. After the meeting their Excellencies entertained the delegates to luncheon.

THE VALUE OF REPORTING CONTAGIOUS DISEASES.

We have already drawn attention to this matter. Quite recently we have been favored with a statement of the vital statistics of Toronto. The figures just given out afford food for thought.

In February, 1910, there were 24 cases of scarlet fever reported. This year during February there were reported 316 cases, and during January, 1911, 331 cases. We have had the system of reporting and quarantining in Toronto now for about 25 years. These contagious diseases, however, break out in the city from time to time.

We think it is the experience of most practitioners in Toronto that as the efforts to prevent children from contracting these diseases a larger number of adults are unprotected and suffering from these diseases.

It would be quite interesting if the ages of those who are reported were given. We think such a statement would bear out our contention that the more strict the regulations are made for the prevention of measles and scarlet fever among children, the larger will be the number of adults who will suffer from these diseases.

We take the position that, sooner or later, everyone will contract chickenpox, mumps, whooping cough, measles, and scarlet fever. If these diseases are not contracted in childhood, they will be contracted when the people are grown up.

The case is different with diphtheria. This is not particularly liable to attack the adult. If children escape, the advantages are quite plain. In the case of smallpox, all ages are liable, but in this case there is an absolute preventive in proper vaccination. Were this insisted on, countries might close up their pest-houses.

In Toronto we think that measures for the prevention of scarlet fever have become too exacting. When a case is reported, the people of the house are compelled to leave home or give up their work. In many cases they cannot afford this, and are almost driven to dire want by these regulations. If the spread of the disease was prevented by these measures, one might willingly submit; but the disease spreads apace.

We think that too strict regulations cause the spread of infection, because people make an effort to conceal these cases. In England contagious diseases are reported, but the houses are not placarded. We regard placarding as quite unnecessary.

THE DRINKING-WATER ACT.

Mr. E. N. Lewis, member of Parliament for West Huron, Ont., introduced a measure into the Commons, Ottawa, a short time ago, with the object of compelling municipalities to supply pure water for drinking purposes.

The bill states that any municipality which takes water for peoples' use from a river, or stream or running water into which sewage is discharged, without properly treating the water and sterilizing it, shall be liable to a fine of \$200 a day.

This bill may not become law, but it points out the trend of opinion. We have on many occasions contended that the municipality which supplies polluted water for its citizens to drink and causes sickness and deaths by typhoid fever and other intestinal diseases, is guilty of a very grave crime against these citizens.

But these citizens constitute the municipality. They are, therefore, committing an act of suicidal folly when, from meanness to spend the requisite amount of money to secure good water, they consume sewage-polluted water.

Our streams and watercourses must be kept as pure as possible.

Sewage must be treated before it is permitted to flow into rivers and lakes.

NEW RULES FOR ISOLATION HOSPITAL.

So the Toronto Isolation Hospital has a new set of rules to govern itself by! These rules are very excellent, and, if lived up to, will do good. To those who do not like to take the trouble to be careful they will, of course, prove irksome.

But the point which we wish to call special attention to is that these rules have been drawn up by the medical health officer to meet several of the recommendations of Judge Winchester.

We contend that the Health Department of the city should always have been able to look after such affairs from its own standpoint, and not have been brought to the necessity of being guided by lay advice in such matters as this, which are purely medical.

However talented the occupant of a judicial position may be, it is rather humiliating for the medical department of a great city to feel that it has to take its lead in needed reforms from such a source. The medical profession will feel that its representatives in health matters must lead, and not follow, in such matters.

THE OPTOMETRY BILL.

For some time past the people of Ontario have been made familiar with an attempt on the part of certain persons who wish to fit people with spectacles to become incorporated under the high-sounding title of optometrists.

To select glasses for one is not even a full branch of medicine. It is only a subsection of the every-day work of an oculist. Some medical men make a specialty of diseases of the eye, and selecting suitable lenses for their patients is part of this specialty.

It would be just as sensible to incorporate certain persons as dermatologists or skin disease doctors. To treat skin diseases is only a subsection of general medicine. We might even look to the incorporation of naval doctors who would treat the diseases of the umbilicus.

There is no limit to where this folly may lead us. Some persons who will not take a course of study and qualify for the practice of medicine or surgery wish to secure incorporation to enable them, on a minimum of training, to practise some small subsection of the healing art.

Thus we could in time have nail doctors, and hair doctors, and spectacle doctors, and umbilicus doctors, all by act of parliament, made out of any persons and every sort of persons who wish to make a living out of the public, and do not wish to go through a proper course of preparation.

Let us have an end of this creation of osteopaths, optometrists, etc., etc. Legislators owe it to their constituents to protect them from this farce.

The optometry bill was killed. Hon. I. B. Lucas gave it as his opinion that it would create a close corporation. There is a decided feeling against this sort of legislation.

THE MEDICAL DUTY OF THE GOVERNMENT TO THE PUBLIC.

We have long felt that the Government owes a duty to the public in the way of providing information along the line of certain foods and medical preparations on the market.

In the United States a number of state laboratory analyses are made of drug preparations placed on the market. The result of these analyses is made public by means of a bulletin.

In this country the Government at Ottawa, or the provincial governments, should issue reliable information on medical preparations that may be placed upon the market, with claims attached to them of powers to cure disease.

A manufacturer may put a certain brand of rolled wheat or oats on the market as a food, and in this case an official analysis is not called for. On the other hand, a manufacturer, not a doctor, puts on the market a cure for consumption. In this case we think the Government is in duty bound to the people, whose servants in public life the ministers of the crown are, to issue for the information of the people an official analysis of such a preparation. This would enable the people to know whether they are really buying a cure or not when they procure such a preparation on the open market.

In Germany a bill is being promoted that will make it punishable to advertise claims for such preparations if these claims are not borne out by the merits of the preparation.

It is the duty of organized society, as represented by its government, to protect itself against fraudulent claims in the interest of any medical preparation merely for the purpose of making gain out of the people.

Here is where our public officials may get busy, and where they will find much for them to do. There is a large forest to clear away.

In New South Wales splendid work has been done. During the year 1910 over 5,000 specimens were examined. The specimens consisted of condensed milk, cordials, syrups, fruit juices, cream, ice cream, disinfectants, condiments, alcoholic liquors, coffee, tea, cereal products, meats, fish, biscuits, baking powders, margarine, sausages, soups, vegetables, etc. This work has had a marked tendency to protect the public against fraud.

RURAL HYGIENE.

One of the most important subjects for present-day consideration is that of rural hygiene. This much may be taken for granted.

It is of little avail for our cities, at great expense, to lay down the most perfect system of water services that money can secure if the milk dealer in the country is allowed to use water from a well that has become polluted with typhoid fever infection through the careless disposal of the excreta from a patient suffering with this disease. One such well was known in England some years ago to cause over five hundred cases of typhoid fever.

Small villages located along the small rivers and streams of a country may be the agents of a vast amount of sickness and the loss of many useful lives. Sewage is permitted to flow into these rivers and streams and all the way down their course is carried disease and death. This is no imaginary picture. It is intensely real.

Far too much of our good money is spent on a whole army of police who are busy chasing after a few drunks, and no attention paid to those who are selling typhoid fever, diphtheria, scarlet fever, and tuberculosis through the distribution of milk that is infected. If there is not sufficient legal provision to reach such cases, then it is easy to make these legal enactments.

No person has a right to throw his sewage over his fence into his neighbor's yard. Much less has any village or town the right to throw its sewage into a stream, and in this way have it carried down to those who live on the same stream a few miles away.

As it is unlawful for a sane person to attempt to commit suicide, so it should be unlawful for a city to contaminate its own water supply, and thereby cause the deaths of some of its own number. These principles must be admitted, and, being admitted, must prevail.

AN ACT TO AMEND THE CHARITY AID ACT.

This act was introduced into the Ontario Legislature by Mr. Donovan.

The object of this act was to enable hospitals to charge and collect from municipalities a fair amount for the maintenance of poor patients.

The act provided that when a patient is brought into a hospital the hospital may notify by registered letter of this fact. Unless the municipality replied within fourteen days, showing that the patient should not be a charge upon it, the hospital, upon the discharge or death of the patient, could collect a sum up to 70 cents a day for the time the patient was cared for by the hospital.

In unorganized districts the hospital should notify the employer of the patient, if he had one, and collect the hospital maintenance from him, in the same manner as provided for in the case of the municipality.

The act also provided for a charge of \$15 for the interment of a pauper patient.

The municipality was given power to collect any sum it may thus pay from the person or his estate.

A municipality might agree with a hospital to pay a fixed amount in lieu of any liability that might arise under this act.

The terms of this act were very timely. Those who have had much to do with the management of hospitals know that it is often difficult to collect from municipalities the cost of caring for patients. This act would have cleared this up, and would have set down a simple and definite method of procedure for the protection of the hospitals of the province.

Knowing what we do about the needs of hospitals and how they have been imposed upon, we had hoped this act would pass, and trust it will not be long before all the several provinces will pass such a measure. Hospitals cannot be conducted without money.

THE BILLS REGARDING OPIUM AND OTHER DRUGS AND PHOSPHORUS.

In the House of Commons Mr. Mackenzie King has introduced two measures of importance from the standpoint of the public health. Both should become law, and, no doubt, will.

One of these bills is to restrain the sale of opium and cocaine, and the other to restrain the use of white phosphorus in manufacturing establishments. Mr. Mackenzie King concluded his speech in the following words, which we have much pleasure in quoting, as showing how

public opinion is rising to a true idea of the value of human life and health:

"In conclusion, let me say that this legislation belongs to the same class as the bill I had the privilege of introducing the other evening, which seeks to suppress the occupational disease known as necrosis. What we are striving for in legislation of this kind is the conservation of human life and of human well-being. A great deal has been said about the conservation of our natural resources; but natural resources are given for the use of man, and not for the destruction of human life. The first of all resources to be conserved are the health and life, moral as well as physical, of our people, and it is to keep these intact, and to help to build up in Canada a strong and happy and a moral people that the Government brings forward this legislation, and does so in the belief that it will pass this House without any opposition."

THIS JOURNAL NOT AMALGAMATING.

A rumor is persistently kept afloat in certain quarters to the effect that all the medical journals published in Canada are amalgamating. This report is absolutely untrue so far as THE CANADA LANCET is concerned. This journal has not the slightest intention of giving up publication. For forty-four years THE CANADA LANCET has done its share to uphold Canadian medical literature, to advocate the cause of the best interests of the medical profession, and to lead in needed reforms in medical education.

This shall continue to be our policy for the future as it has been in the past. We warn those who issue or circulate any report to the effect that this journal in any way intends to go out of publication that they are rendering themselves liable for legal action. The motive for the rumor is apparent, but it is as baseless as Prospero's vision in the "Tempest."

The meeting of the Ontario Medical Association this year at Niagara Falls should be made a record one. The date is May 30, 31 and June 1. Members of the profession throughout Ontario should try to be present.

ORIGINAL CONTRIBUTIONS.

GRAVES' DISEASE.*

By H. B. ANDERSON, M.D., L.R.C.P. (Lond.), M.R.C.S. (Eng.), Associate Professor of Clinical Medicine, University of Toronto.

THE remarks which I shall make this evening are based principally on the observation of thirty-five cases of Graves' disease, seen either in private, consultation, or hospital practice in Toronto during the past eight years. Many of these cases have been followed carefully over a number of years; others have been seen in consultation with medical confreres, or under circumstances which did not permit of their subsequent course being followed closely or for a sufficient time for thorough investigation. In addition to my own cases, in order to gain some idea of the frequency of the disease throughout the province, as well as of its clinical course, I communicated with Dr. Williams, of Bracebridge, Drs. Middlebro and Danard, of Owen Sound, and Dr. Bird, of Gananoque, from whom I received notes of thirty-one additional cases.

These cases represent very well the various clinical types of the disease—mild, moderately severe, acute, toxic, and mixed. I shall avoid any attempt to enter into an exhaustive discussion of the subject, and confine myself to a consideration of some of the less commonly emphasized points or to those wherein opinion is still unsettled. That the disease is one of unusual interest alike to the physician, the surgeon, and the pathologist is reflected by the numerous contributions to current literature from all quarters dealing with it. While there is a very general acceptance of the view that an over-secretion or a perverted secretion of the thyroid gland is accountable for perhaps most of the symptoms of the disease, yet it is generally recognized that this is not the ultimate cause. The factor initiating this abnormal thyroid activity is still unknown. Again the associated or secondary changes in the thymus gland, pituitary, adrenals, pancreas, heart, kidneys, blood, and general metabolism are by no means well understood, and are deserving of much more attention than is often given them. That there is a coincident enlargement of the thymus gland can at times be demonstrated clinically, and has frequently been found at autopsy, especially in the acute toxic forms of the disease.

The association of diabetes with thyroid enlargement is well recognized clinically. I have recently had three such cases. In one typical case of Grave's disease the patient, a young married woman, was operated on by Dr. Shuttleworth with marked improvement of symptoms—in fact, she was considered to be cured—but she subsequently de-

* Read before the Section of Medicine, Academy of Medicine, Toronto, Dec. 14th, 1910.

veloped diabetes in a severe form, and died within two years from the time of operation. Some believe that on the basis of the action of hormones, the perverted thyroid secretion initiates a pathological activity in the thymus gland, pancreas, hypophysis, adrenals, or general metabolism, so that in cases of some duration a widespread disturbance of the ductless glands becomes an important part of the disease.

Myocardial degeneration is also of frequent occurrence. This is partly to be attributed to exhaustion from tachycardia, but a more important factor is the toxic action of the thyroid secretion upon the heart muscle.

Myocardial insufficiency, with dilatation, was of frequent occurrence among my cases, and in some instances the cardiac features of the disease were so pronounced and overshadowed the other features so much that the true nature of the patient's condition had been overlooked. In one case the patient's tachycardia was of the paroxysmal type, the patient being conscious of a sudden jump of the heart, the frequency of which was suddenly doubled.

Marked albuminuria up to 3 per cent. bulk was found in four cases, with œdema of the extremities, no doubt due to a toxic nephritis. The nephritic cases generally had well marked cardiac involvement.

The condition of the blood in Grave's disease has been the subject of special investigation by Kocher and others, who have shown its great importance in relation to diagnosis and prognosis. These studies of the blood have also widened our knowledge of the pathology of the disease. The most striking feature of the blood picture is the marked increase of lymphocytes, with a corresponding decrease of the polymorphonuclear forms. The total number of leucocytes is lessened and the rapidity and intensity of coagulation decreased. It has also been shown experimentally that lymphomatosis can be produced by the injection of thyroiodine as well as by the administration of iodide of potash, and that the injection of thyroid extract in rabbits and dogs produces the changes in coagulability noted in Grave's disease. The investigation of the blood, therefore, affords a valuable means of differentiating the disease in doubtful cases, as well as in checking the results of medication and operative treatment. Dr. R. W. Mann has made repeated examinations of the blood in six cases of well-marked Grave's disease under my care, and in each case has found a lymphocytosis varying from 44 to 58 per cent. In one case in a young lady of 21, in whom the tachycardia, tremor, and exophthalmos have disappeared but in whom general nervousness and some thyroid enlargement persist, lymphocytosis of 44 per cent. is still present, indicating a continuance of the thyroid toxæmia. Kocher states that in cases of complete cure following operation this lymphocytosis disappears. It would be highly instructive to have the results

of operative treatment in all cases checked, by such examination before pronouncing the patients cured.

In considering Grave's disease from the clinical viewpoint, too much attention has been centred on the thyroid gland and hyperthyroidism, with the frequent assumption that, with the removal of a sufficient amount of the gland, the toxæmia will be relieved and the patient cured. It is, however, well known that in some of the worst cases the gland is not appreciably enlarged, and that in cases of long-standing secondary fibrosis may occur, with a deficiency or secretion even tending to myxœdema. Beebe has especially directed attention to such mixed cases, and finds that at times, in addition to his specific cytotoxic serum, small doses of thyroid extract may have to be administered in order to cure the patient. Nine of these mixed cases occurred in my series. They are especially common in cases of ordinary goitre of many years' standing, with fibrosis, and particularly in women who develop symptoms about the time of the menopause.

In attempting to form an opinion as to the possibility of cure in a given case, whether by medical or surgical means, it is necessary to consider the degree to which permanent organic injury has already been done to the heart, kidneys, central nervous system, etc. Surgeons, in view of the importance of these secondary changes, urge the necessity of early operation. Their consideration certainly impresses one with the importance of early recognition of the disease, in order that the most efficient treatment may be instituted to ward off the secondary effects of the toxæmia. Notwithstanding the fact that in the hands of the best operators the mortality in selected cases has been reduced to $3\frac{1}{2}$ or 4 per cent., most physicians will hesitate to subject early mild cases to operation until medical treatment has been fairly tried.

A grave responsibility, however, rests with the physician not to persist in ineffectual medical treatment until secondary changes develop which render surgical measures hazardous or of no avail. In this connection not only must the well-recognized cardinal symptoms be taken into account, but a careful watch kept on the weight of the patient, the digestive functions, and the condition of the blood, the heart, the kidneys, etc. The possible danger from a relapse, with the development of acute symptoms, must always be kept in mind. If after a few months' rest and medical treatment the patient is not proceeding satisfactorily towards recovery, operation, if the case be a suitable one, should be considered. The preliminary medical treatment, even if it has not cured, will often have produced such a degree of improvement in the patient's general condition as to make the case more favorable for operation.

In advising operation in a given case the physician frequently appreciates the lack of sufficient accurate data as to the ultimate results

to be expected to enable him to base an opinion. Surgeons have furnished abundance of mortality statistics after operation, but not enough information as to the degree in which complete cures have been effected. That relapses frequently occur after operation, that partial invalidism often remains, that œdema or diabetes may occur is well known. If we were always sure that, having escaped the immediate dangers of removal of the thyroid, the patient might confidently look for a cure, the matter would be simple, but unfortunately this is not the case. There are certain types of cases, and these the worst in which operation cannot be undertaken without great risk.

1. In the acute toxic forms, with extreme tachycardia, rapid emaciation, vomiting, diarrhœa, intense nervousness, and prostration.

2. In cases with advanced cardiac or renal disease, diabetes, or other complication that would render operation extremely hazardous and in which a cure is precluded by the secondary organic changes.

3. Long-standing mixed cases, with fibrosis of the gland, hypothyroidism and threatened myxœdema.

On the other hand, in certain cases the indications for operations appear clear.

1. In cases in which serious local pressure symptoms appear, along with the other signs of the disease.

2. When for cosmetic reasons the patient is anxious to have the enlargement removed.

3. In cases of moderate severity in which a condition of partial cure or semi-invalidism persists, after medical treatment has been given a fair trial. Here it is important not to delay until serious secondary changes appear.

In my experience a complete cure—that is, with the disappearance of the tachycardia, tremor, exophthalmos, thyroid enlargement, nervousness, lymphocytosis, etc., does not occur in more than 10 per cent. to 15 per cent. of cases. In four of my cases—all mild, but still definite—recovery is apparently complete. In one case the recovery is complete except for a slight unilateral exophthalmos. In another case the symptoms have all disappeared except extreme nervousness.

In a large number—15 out of 35 or 42 per cent.—there was very marked improvement, and some of these patients consider themselves quite well, but thyroid enlargement or other symptoms persist.

Four cases—11 per cent.—died from the acute toxic form of the disease.

Two severe chronic cases died from the recrudescence of symptoms; two cases died shortly after operation; one case two years later from diabetes, and one patient is greatly improved by operation, but is showing some signs of myxœdema.

In 15 of my cases the patients were over 40 years of age, and in most of these operation was precluded owing to advanced cardiac or renal involvement, the age of the patient, the large size of the gland, the presence of fibrosis, with some signs of myxœdema, etc. Many of these cases were of the mixed type described by Beebe and Rogers. Marked improvement was the rule under the usual medical treatment, though nothing approaching a complete cure has occurred.

The acute toxic cases showed no response to treatment. In three of them the uncontrollable diarrhœa and vomiting made ordinary medication and feeding impossible. One patient, a young school teacher, seen in consultation with Dr. C. J. Hastings, died in about ten days after the onset of the acute symptoms.

The results obtained by Beebe and Rogers with their serum in this type of case have been so striking that I shall not hesitate to use it in future. In one case of severe type which I saw through the kindness of Dr. Allan Adams, the improvement after 18 months' serum treatment has been very satisfactory, though by no means a cure. I have another case under treatment at present, but it is too soon to judge of the results.

For some years I have used hydrobromide of quinine, as recommended by Forcheimer, and thyroidectomia in my cases, and over long periods, and while improvement frequently followed, one could not be sure that this was not due more to the rest, mental as well as physical, which always seemed the most potent single factor in controlling the disease. In a few of my early cases treated by bromide, ergot, and belladonna, the results appeared equally good.

Electricity—static, galvanic, and paradic—all failed in my hands to do any good. X-ray treatment and vibration are remedies recommended by some, but personally I would hesitate to use them for fear of cytolysis or pressure on the thyroid increasing the toxæmia.

Radium has been claimed by some to do good, but I have had no personal experience with it. From its possible cytolytic action in the proliferating gland cells, a priori, one would be cautious in using it.

Fresh air, proper diet, with abundance of milk and little meat, phosphate of soda, as recommended by Kocher, ice bag to the heart or goitre in severe cases, have all appeared to be beneficial.

When one considers how frequently fright, worry, nervous shock, etc., appear as exciting causes of the disease, the great importance of avoiding anything of this kind and of preserving mental as well as physical rest in treatment is readily apparent.

Profuse and persistent salivation was an unusual symptom in one case, now improving satisfactorily after six months' treatment. The relation of the sexual organs and the thyroid was frequently noted by an exaggeration of symptoms at menstrual periods, and often at the meno-

pause. In two of my patients who became pregnant, the symptoms improved, and this improvement has continued.

The early mild cases often do well; the more severe cases are long drawn out, may relapse even after years, and, while improvement is very common, a complete cure is very uncertain. It is in this class especially that early operation should be considered.

The disease is a frequent one in Ontario, and is often of a severe or even acute toxic form. Of the 31 cases of which notes were given me by Drs. Williams, Middlebro, Bird, and Danard 12 terminated fatally, 3 after operation.

Of these 12 cases 9 were of the acute toxic variety. When one reads of the success attending operative treatment, obtained by Kocher, the Mayos, Ochsner, Crile, etc., the question naturally arises as to whether these results are not obtained by a more careful selection of cases, excluding the severest forms of the disease, or have we in Ontario a severer type of the disease than is found elsewhere?

In comparing the results of medical and surgical treatment, it must be borne in mind that the former has to deal with all cases, from the mildest to the most severe, and not with selected cases such as the surgeon desires for operation.

If one is on the lookout for the disease and makes a careful examination of the thyroid gland in all cases of nervousness, he will be rewarded by the early recognition of many cases. Treatment, whether medical or surgical, will be more satisfactory when the diagnosis is made early, and for this reason it is important that practitioners be alive to the frequency of the disease, its symptomatology, especially in the mild or larval forms, and the aid to be obtained from careful blood examination.

The results in the series of cases submitted cannot be taken as a fair index of the value of any form of treatment, as in most of the cases the attending circumstances were such as to prevent consistent observation or satisfactory management. They do, however, indicate the problems presented in practice by Grave's disease, and the advanced stage often reached before medical relief is sought.

Indicating the relative frequency of Grave's disease and sporadic adult myxoedema during the period covered by the observation of these cases, while a number of mixed cases have been seen, as before mentioned, only one well-marked case of myxoedema has come to my notice. This patient dropped twenty pounds in weight in a few weeks under thyroid feeding, and from being a helpless, ugly-looking creature has become a healthy woman of good appearance.

THE MANAGEMENT OF SURGICAL CASES.

By G. A. BINGHAM, M.D., Toronto.

DR. G. A. BINGHAM made some introductory remarks. He said that there would always be different methods both in preparation and after treatment. He usually gave a saline laxative two days before the operation and an enema the evening before. The skin should be made clean, without injuring it by too rough methods of rubbing and scrubbing. He said that great care should be taken to avoid shock. This condition was due to too much blood in the portal system, and not primarily to cardiac weakness. It became clear that cardiac stimulants would not be of much service in the state of shock.

The risk to shock in surgery increased as the operation was high in the abdomen. There was not much danger from shock in pelvic surgery. The main rules to keep in mind are:

1. Work as rapidly as safety will permit of.
2. The serous surfaces should be handled gently, and as little as possible.
3. Avoid loss of blood as much as possible.
4. The patient must be protected from cold. On the other hand, the room should not be too warm nor the patient covered with too much clothing.
5. Interstitial, rectal, and intravenous injections of normal saline solution are the chief remedy. If only a small amount of fluid used, the shock may return; but if sufficient quantity is injected, the shock will not return.

The following points must be noted:

1. If the peripheral resistance is lost, the, no amount of transfusion will save the patient.
2. If only the splanchnic area is too full of blood, transfusion is very valuable.
3. If the collapse is due to loss of blood, transfusion is the real remedy.

In cases of intestinal paresis in septic cases the bowels should be early evacuated by laxatives and laxative enemata. This drained toxins from the system, emptied the vessels, and permitted the absorption of fresh fluids.

In pain it is well to avoid the use of morphine as far as possible. Bromides may do good by quieting the nervous system and enabling the patient to sleep. Patients should be encouraged to drink water freely, and a saline solution should also be given by the rectum and into the

* Abstract of an address at the Academy of Medicine, Toronto.

tissues, if there is need for fluids. Patients should not be allowed to endure thirst.

Sleeplessness may be overcome by massage or placing the patients in a fresh position or changing them to other beds. They should not be permitted to lie on their sides, as the dorsal position is not a normal one.

In shock firm bandaging of the abdomen, or the lower extremities, and elevating the foot of the bedstead were helpful.

THE PREPARATION AND AFTER-TREATMENT OF HEAD AND NECK SURGICAL CASES.*

By INGERSOLL OLMSTED, M.D., Hamilton.

IN the preparation of patients for operation on the head and neck simplicity is the word. Dr. Cushing indicated the principles in his paper a few weeks ago for most of the operations on the skull. Too much scrubbing appears to me to be often worse than too little. The day preceding the operation the head may be thoroughly washed with soap and water. On the morning of the operation the head should be shaved sufficiently for the operation proposed. It is not necessary, for instance, to shave the whole head for a decompression. It all depends on the extent of the operation. After shaving, the parts should be thoroughly washed with warm water and a solution of green soap in alcohol, to be followed by a 3-5 per cent. solution of carbolic acid in water.

In cases of cancer of the tongue, tonsil, or jaw, where a lot of diseased or defective teeth are present, these should be treated at least a week before operation, in order to allow the injured gums to recover. If this be impossible, I think it wiser to remove them at the time of operation rather than stimulate the dormant pus organism by frequent cleansing with a brush, a procedure which, in many cases, they are unaccustomed to, and resent. In a number of such cases I have given the streptococcic vaccine two days before operating. The after-treatment of these cases is most important. There is a great tendency for the blood to collect and harden on the hard palate. This must be removed by means of pledgets of cotton on forceps and the mouth washed out. The stitches may be removed on the second or third day, but the drainage of the neck retained for some days, especially when a free dissection has been made and the mouth cavity opened into. This, of course, is unnecessary when the two-stage operation is done. Where there is a discharge, antiseptic dressings should be done.

* Read at the Academy of Medicine on 7th March, 1911.

In Graves disease the greatest care must be taken in studying the patient before attempting any operation. During the last few years no subject in surgery has excited more interest to both physicians and surgeons. At the last meeting of the British Medical Association both the physicians and surgeons claimed best results by their special treatment. Both were right. Unless the surgeon has extremely good luck, or else takes the greatest care in the preparation of his patients and chooses the proper time for operation he will meet with failure. At one time I felt that all cases would be successful when operated on. Later it seemed that there was too much risk with an operation. Now I know that the cases must be carefully chosen, operation should be done only on those which are physically fit.

Austin found marked changes in the medulla, motor area of the cortex, and in the cells of Purkinje in a fatal case of Graves disease. There was marked chromatolysis—rupture of the nuclear membrane and disintegration of the nucleolus. Crile found a similar condition in experimental Graves disease. Cases of paralysis, more particularly of the cranial nerves, have been reported by Kappis, Cohn, Möbius, Choostek, MacKenzie, and others.

The whole organism suffers. They are bad operative risks, hence any operation on the thyroid gland should be approached with the greatest care. Estimate the forces of your patient, and do not attempt too much. The patient must be studied before such an operation, more so, perhaps, than in any other disease. The condition of the pulse, temperature, stools, nervous system, urine, etc., must be carefully noted. The neck should be handled very gently, and nothing allowed to disturb the patient. Although the manipulation of the gland may not produce hyperthyroidism, yet in some cases it does, and every care should be taken, as we do not know just what causes the serious symptoms which too frequently follow an operation. At least one or two weeks should be taken in observing the patient. Bright surroundings and cheerful attendants are necessary to give the patient confidence in the ultimate result. When this care has been taken one is in much better position to judge the wiser procedure. C. H. Mayo had two deaths following the ligation of the thyroid artery, one under general and one under local anaesthesia. It is far better to go slowly and not attempt too much at any one sitting. Crile advises testing the patient's resisting power by giving small doses of morphia and scopolamin and also ether. If the reaction is satisfactory, he operates accordingly. He advises a combination of a general with local anaesthesia. The patient does not know when the operation is to take place, and thus the element of fear is eliminated. The after-treatment consists of plenty of saline by the

bowel, free drainage, and quietness. The convalescence should be assisted by a "rest cure."

When one considers the destructive character of the disease it is easy to understand that time, rest, and tonic treatment is necessary to restore the crippled organism.

BEFORE AND AFTER TREATMENT IN PELVIC CASES.

By WILLIAM BURT, M.D., Paris, Ont.

IT is with much concern that I am taking up the time of the Academy on the treatment before and after of pelvic operations. I am sure that it is not intended that I should exhaust any one subject of this phenomenally large field. All I may be expected to do as a general practitioner will be a rehearsal of what has been done, and should be done, in what the general practitioner is most apt to meet with. It will appear to take up your time unnecessarily in bringing before us what will seem to be the exercise of a little common sense, or what is seemingly self-evident. In the subject given me it is taken for granted that an operation is required. In pelvic cases, as well as in the majority of surgical cases, there is very much that is common so far as aseptic and antiseptic surgery is concerned. I will dwell simply on what I feel has militated against the operator. That the health of the patient should be brought into the best condition possible goes without saying. I had one very trying case in one of my favorite operations. It will apply to pelvic as well as other operations. I always have been depending on primary union, but this case, on my first dressing, gave me much uneasiness. I am now directing you to a condition that may accompany any operation. It will happen in other cases as well as pelvic. I used all precaution, but at my first dressing my drainage tube was most offensive. I had a skilled nurse, a private house, and everything prepared, as I thought, up to date, but, in spite of it all, there was a great deal of suppuration. My patient admitted to me during convalescence that her flesh did not seem to heal of late. If she bruised herself there was a sore—very reluctant to heal. Now, it is likely I should have found this out and have given her another three or six months to get her tissues into a somewhat normal condition; but it was a carcinoma, and delay is dangerous. We have all met with this condition. However, I consoled myself by telling her that it was generally believed that when there was considerable suppuration it destroyed the malignant germ, and that a return was less likely. I tried hard to keep up my spirits, for of quite a number of operations of the same kind, without any suppuration, I have

had no return. Now, specially in regard to the preparation of pelvic cases, it is truly asserted that with the absence of the gonococcus and tubercular and, let me add, the streptococcus, there would be very little for the gynecologist to do. I may say in the model town where I reside I seldom come across these germs or their results; perhaps they drift elsewhere. To sum up, my chief operations have been for myoma and ovarian cysts. I cannot record a fatality as the result of the disease in any of those that would submit to an operation. Quite a number in a good many years were cared for at St. John's Hospital, Toronto, by the late Dr. Ogden and Mr. Cameron. I can recall one only who would not consent to an operation until she felt that she could no longer resist the disease. She consented only too late. In this case there was no after-treatment. It became inoperable, as an exploratory operation demonstrated. This patient developed mumps shortly after exploration. One of the first injunctions should be "no sexual intercourse for several months." Both the male and female are very negligent oftentimes in regard to their sexual organs. Much has been done in this respect by attention at birth to dilate the prepuce in the male retract it and remove all smegma. By inculcating in the youth the strictest cleanliness, when manhood is reached and the marriage tie is made, both parties should be absolutely free from any contagion or infectious germs. The gynecologist knows well the same uncleanliness exists, and is frequently met with in the labia minora, and I must say I have been horrified to detect this condition of affairs in individuals who were supposed to be cultured. The physical condition of our patients is apt to control the surgeon, but I feel that the mental condition of our patient has much to do with recovery.

Another point, and it will bear repeating, and that is that a female is supplied with a Chinese wall in the normal secretions of the vagina, which, in a measure, prevents the attacks of the invading pirates. If the discharges are not offensive, it is pretty certain that the natural secretions are doing their duty, and the attendant should allow them to perform their work. I have had, I must say, numerous cases when the menstrual discharge has proved irritating, and, when the husband has not in any way brought it about, we find the os has the appearance of beef-steak. The irritating properties of the menses seem to be due oftentimes to debility.

It would be well for our profession if we had the power of some of our telepathists to read the minds of many patients. Even to-day some of our educationists assert in the strongest terms of their ability to do so; but, beyond the aid of suggestion to overcome the mimicry of diseases, I feel much can be done in many pelvic conditions of a nervous origin. No doubt the best preparation is to make a correct diagnosis. This is due our patients. They should be fully impressed that their adviser

is doing all that can be done. If you will excuse me, I will give some of my time to a few remarks on diagnosis as the best preparation for an operation. It is very gratifying to the surgeon if he finds what he is operating for. I will dwell upon a few cases that I have been agreeably disappointed with. I was called to a lady whom I knew in my schoolboy days. She has a large family, and had much trouble in making some of them good citizens. It was the usual history—a slight sanious discharge, offensive, colored, etc. The physical examination corroborated it. There was undoubtedly a carcinoma of the uterus, so I thought. I told the family all about it—carcinoma of the uterus. She would not go to the hospital. If Dr. B. could not do more for her, she would not leave her home. About two years later I was called on account of a severe dysentery. In the meantime I wondered that I had not notice of her death. The first thing she said to me, was her present trouble caused by her cancer? I said I would soon see. Examination revealed a normal os and uterus; no discharge, no offensiveness for some time; did not know that anything came from her. There is no doubt in this case a sloughing mucous myoma had been cut off and dropped in the w. c. without her knowledge. In good health to-day.

One of my earliest operations was tapping a cyst of the broad ligament. Of course, I did not know it was the broad ligament. It was the operation of those days. It was very large. It never returned. Of course, the only operation to-day is a laparotomy. It is as safe and safer than the tapping.

Even in a cyst of the broad ligament, I can recall one of my operations that I feel the technique mismanaged, and it has been a life-sore to me.

I will discard much of the preparation for a patient to be operated on by saying that any of the various preparations by our distinguished surgeons will be ample. Whether it is scrubbing with green soap, ethereal soap, or potas. perman., followed with oxalic acid and alcohol, I feel that any one or all will give good results, as I have known them to do. Even to-day I saw an item that nothing could be depended on but Churchill's Iodine (see the January *Surgeon*). "It is confusion worse confounded," as I well know myself. Suffering as I have of late from muscular rheumatism, I ordered my nurse to apply it, but the cure was worse than the disease. I had an extensive slough and, like carbolic dressings, though weak, the wound is often slow to heal. All this is to be considered. Take several other matters—a bleeding tendency on the part of the patient, many ecchymoses—militate against operations. Diabetes, also, it is possible that careful preparations may help to a successful issue. If we get uniformly good results from our routine preparations and have no reason to think there is a defect against better results,

I do not think we should get off our track and try another, unless we can save time or relieve any element of danger. Age does not seem to militate against operation. I cannot forget the saying of our friend, Dr. Reeve, that an octogenarian is made of pretty good stuff, for, as is well known, many a successful operation is performed after 80 years. This has led to many successful operations. I am sure there is very little to be added to what is already known. Again, the presence of a rash in the vicinity of the incision, or the inflamed umbilicus, may seriously infect a wound, especially in cases of obesity. What must be done is to decide that there is a balance in favor of the patient's improvement or recovery. As all are aware, there must be a full consideration of the mental, as well as physical, factors in every case, and there is much to be said in regard to the mental condition, and especially the condition of the insane. How far we are justified in performing many operations remains to be told. We are told that insanity is likely to follow many operations previous to which the mental condition was normal or stable; no operation on the insane unless the operation is done to prevent death, strangulated hernia, a sloughing myoma. If the operation is one to prolong life it should be done. It seems that while insanity is apt to follow an operation, violent insanity is apt to supervene on the mild forms after operation. For this reason it does seem that an operation on the insane should not be undertaken unless the conditions are such that the life of the patient is endangered and that the operation is called for in consequence of impending danger. It does not seem that the cure of insanity from some trifling disease by an operation will overbalance the cases of insanity following trifling operations. This matter should be considered in the preparation of cases.

To illustrate many things the pelvic surgeon has to contend with, I will relate a case of a young lady who had a cystic ovary somewhat adherent and displaced behind the uterus. This was removed, as well as the appendix; a couple of years later she had the other ovary removed; later on, on account of dysmenorrhœa, she wanted her uterus removed. As to that, I have not heard, although all arrangements were made. She was sent to me for advice, but my advice was of no use. She insisted she could not swallow anything, that she had not taken any nourishment, and that she would not be able to until her womb was removed. She would take food in her mouth, but could not swallow it. She suffered so much she could endure it no longer, and nothing would relieve except the removal of the womb. Now, it is well known in many cases all these symptoms are present, with possibly the exception of the dysmenorrhœa, in some, and have yielded to careful tubal feeding and suitable baths. Fortunately, or unfortunately, her surgeon agreed with her that her stomach could not retain anything. It had become so con-

tracted that it would not enlarge again until her pelvis was still further emptied. Now, all these operations may have been justifiable, for when the adnexa require removal the uterus is removed as well, although not diseased. Some of us will remember that it was demonstrated by one of our visitors to the Ontario Medical Association some years ago that the menopause would not be established unless the nerves which are very close to the superior angle were removed. Now, much of this may seem irrelevant, but most patients wish to be prepared as to the extent of their troubles and the relief to be obtained by an operation. She will insist on knowing how much of her possessions are to be removed. To save trouble afterwards, the surgeon is expected to have the full consent of his patient, and she is expected to allow her surgeon and his assistants to use their best judgment in case unforeseen complications arise. There is much to be said in favor of the opinion of the trustworthy family physician, who knows the idiosyncrasies of his patients. I have been somewhat chagrined by a discovery of peculiarities which were overlooked. What can be done in the way of pelvic surgery is only too well-known. In fact, it is astounding—almost miraculous. A woman may have the genito-urinary organs removed, the uterus and the adnexa, the bladder, even, and the rectum, a kidney, and then have the ureters implanted into the abdominal wall and the bowel. What more can be done? And all this after a very careful preparation on the lines of aseptic and antiseptic surgery. This may seem like exaggerating a little, but on paper the ideal is not far off. A very strong help in pelvic operation is the assistance of an anaesthetist who is up to date. There is not the least doubt that the operating table that will relieve the pelvic surgeon is of great assistance, and these tables are under the control of the anaesthetist, notwithstanding arguments in favor of the level position. I have not referred to cases of appendicitis. One cannot select his cases here, and when I say I have had uniformly good results in pelvic cases, as a general practitioner I must say the recoveries in appendix cases, which can be truly said to be pelvic in many cases, were not uniformly successful. To mention one case in particular: The patient, no doubt, had repeated warnings to allow an operation in the quiet stage. When operating we found a gangrenous appendix, which was pulled away like a fishworm from the centre of a mass of exudate; the appendix was most offensive.

If you will allow me to refer to a few points which I have not touched on in my haste to be with you to-night, I will detain you but a moment. When one patient is confined to bed and cannot well be removed to another bed, let me say that the rack, which is usual in fractures of the lower extremity, is very beneficial in allowing the escape of gases, not only from the bowel, but of exhalation from the skin as well.

The relief of weight also is beneficial. Again, the moisture of the room should be attended to; a dry air does not relieve thirst and the insensible perspiration conduces to thirst. With many surgeons the soft pillow or bolster beneath the knees is a great relief from backache, whereas in most cases there is a faulty construction of the springs.

Now, in the symposium to-night it would fall to my subject to say something in regard to the cystoscope, and perhaps specially to the now comparatively modern operation of prostatectomy, but time will not permit. Many years ago the late Dr. Lizars and myself discussed the question of invading the prostate. We attacked the gland through the bowel with injections, thinking to bring about resolution, but now it is prostatectomy, with little danger on the part of the patient.

In selected cases and in the hands of experts there seems to be a race, as Dr. Olmsted tells us, between the thyroidectomists and the prostatectomists. Both operations, with the proper treatment before and after, have come to stay, and there is no doubt of the great relief from suffering these operations have afforded. Is there not much to be done to prevent the enlargement of both glands in the early stages?

This is a field for the future. I refer here to the thyroid, as it is so common in women to find enlargement, and possibly sympathetic in the early stages of some pelvic irritation. It is almost too much to say we should look out for anomalies.

Only this week a patient, 18 years of age, was referred to me with a still patent urachus. A swelling formed at the umbilicus, which was opened by the attending surgeon, and since a urinous discharge—capillary—keeps up from the bladder, as a very firm probe demonstrates. A thick cord can be felt between the umbilicus and the bladder. An operation, of course, will remedy this.

THE PREPARATION AND TREATMENT OF ABDOMINAL OPERATIONS.*

By W. G. ANGLIN, M.D., Kingston.

AN opening into the abdominal cavity is always a matter of much importance to the patient. It should never be forgotten that what may appear ordinary and routine to the surgeon may appear quite the reverse to the person who is ill.

The state of the nervous system is of the utmost importance. Patients should be kept as cheerful as possible.

* Abstract of paper read at Toronto Academy of Medicine.

The patient should not be told that the case may be one of several conditions. It is not good for them that their minds should be filled with doubts either as to diagnosis or prognosis.

Go into everything thoroughly. Test the urine from each kidney. Note the condition of the blood as to its coagulability, and make a blood count. The condition of all the organs should be looked into.

Examine the abdomen with warm hands. Palpation should be done gently. The parts should never be handled roughly. Much harm may be done, and the muscles resist the fingers. A number of examinations should be made, and a consultation should always be had.

The patient should be sent into the hospital two or three days before the operation. They should receive a hot tub bath. The condition of the mouth and teeth should receive attention. The bowels should be acted upon, but over-purgation must be guarded against. The patient should be properly nourished, as it is a great mistake to reduce strength by underfeeding. The urine must be carefully tested. Too long preparation of the patient is bad. Two nights before the operation the diet should not be much reduced. The day before it ought to be confined to broths and light foods, and, the night before, light liquids. In jaundice cases give calcium salts for a day. The bowels should be moved the night before the operation by means of an enema. In emergency cases empty the bowels with an enema.

The skin should be cleansed by means of soap and warm water. Some do not prepare the part till the morning of the operation. A green soap poultice over the part for two hours. Ether is employed by many to remove fat. Some favor bichloride solutions as a final cleansing. Ethereal soap is useful. Professor Harrington's solution is a useful and reliable antiseptic. The navel should be thoroughly cleansed. Some paint the part with iodine just before the incision is made. Morris advocates the use of depilatories for the removal of hair rather than shaving the parts. A brush should never be used, as it injures the skin and favors the entry of germs.

A good sleep the night before the operation is valuable. To secure this give a dose of H. M. C., and again in the morning. By this means very little of the general anaesthetic will be required.

Gloves should be used, but the hands ought to be prepared with the same care as if the operation was to be done without gloves.

Needles, knives, etc., should be boiled in water containing one dram of soda to the pint. Do the operation with as few assistants as possible.

The after-treatment may be summed up in a number of definite general rules.

Put the patient in a warm bed, with warm clothing and bottles. Supply a good nurse. The head should be kept low, and turned to one

side. The patient should be rubbed with a warm towel. The patient should not be kept continuously on the back. Pillows under the knees afford relief. Vinegar may be inhaled for the nausea. An enema of salt solution is useful to relieve thirst and lessen shock, if any. Sips of hot water or coffee may be allowed. A glass of hot water with a dram of soda may settle the stomach. Shock must be treated by means of warmth, salines, and nourishment. If there be much pain, give small doses of morphia. No solid food should be given till the bowels move.

The patient must not be allowed to become constipated. Calomel is a useful laxative. Ox gall is good. Enemata of turpentine and glycerine are also very serviceable. One ounce of each should be used at a time. If there is much tympanites suspect obstruction from adhesions, and a change from the Fowler to the Trendelenburg position may afford marked relief.

Septic cases should be treated by free drainage, the Fowler position, and salines into the rectum.

DISCUSSION.

Dr. J. F. W. Ross said that he had heard a good deal that he could agree with and much that he differed from. He held that patients did quite well in the horizontal position and allowing them to lie on their sides. He did not think that the Fowler position or the Trendelenburg position afforded any special advantage. He always gave morphia for the relief of pain. It was much better for the patients to secure rest for them than to have them suffering needlessly. He did not believe in over-purgation, nor too severe a reduction in diet prior to the operation. With regard to the preparation of the skin, he thought it was not necessary to scrub the skin too much, as ordinary simple cleansing will answer. This can be accomplished in various ways—by soap and water and mild antiseptics to the part.

He thought patients should be allowed water in moderation to drink. It was necessary to secure action of the bowels after the operation, to prevent tympanites.

Dr. N. A. Powell thought that surgeons could secure good results by different methods of preparation. He was opposed to too much preparation. The skin should be cleansed, but not scrubbed. This cleansing could be accomplished by different methods. When Lister began his antiseptic work he befogged the whole subject with too many details, but Volkmann got away from this, and was able to say "fort mit dem spray."

He thought it was much better to teach students principles than rules. When a surgeon tried to operate by any set of rules he usually "got his foot into it."

He was in favor of castor oil or calomel as laxatives. But purging should never be carried to excess. He approved of the use of morphia for the relief of pain. It was much better to secure rest than to have a nervous breakdown on the part of the patient.

He condemned in the strongest terms the habit of letting patients up too soon.

Dr. W. P. McKeown was of the opinion that far too much was often done. He contended that patients were made to suffer a great deal through the giving of enemata, and could not see the need for doing so. An ordinary amount of laxative was all that was needed. Many cases brought in from the street with quick preparation did very well. He was of the opinion that "the after-treatment should be given before the operation," to use a reversed expression.

The skin should never be scrubbed nor rubbed harshly. He did not believe in the application of strong chemicals to the place of operation. If the parts had to be shaved, a proper razor ought to be used, and not such an one as was usually to be found in hospitals. He had never employed depilatories, and was unable to see why they should be made use of.

He was not afraid to give morphine for the relief of pain. It was impossible at times to do without it. With proper care before the operation it would not be necessary to resort to it very often. We should be careful and not do too much, and what was done to do it properly.

Dr. John Hunter held that the physician should not turn his patients over to the surgeon. He should remain the captain of the case all the way through. A surgeon should only be called in by him to carry on the surgical side of the case, but never to take it over from the physician. It was the duty of the latter to watch the blood counts, to make the urine tests, to see that heart and lungs were in proper condition, to use sera if required. It was his duty to see that the patient was in proper condition for the operation. He held that physicians had taken a back seat far too long in this matter. He would refuse to have any surgeon with him who wished to take the case out of his hands, and he thought this was the proper course to follow.

Dr. F. W. Marlow was of the opinion that it was well not to do too much preparation. Rough handling of the skin was bad. Too strong chemicals only lowered vitally and favored suppuration. The viscera ought to be subjected to as little injury and handling as possible, as this all tended to shock. The horizontal position was generally the proper

one. He would give morphia for pain, and water to the patient. It was very hurtful to allow any patient to go on suffering from thirst. He favored giving the patients four hours before the operation some light nourishment about the equivalent of a test breakfast. They did better after this plan, and had less nausea and vomiting.

Dr. Clarence Starr said that patients often suffered with backache after operations. He felt that when the patient was under the anæsthetic and the muscles relaxed the ligaments of the back became strained on the operating table, from the positions the patient might be placed in, or from the fact that there is no support under the back of the patient during the operation. He thought that if a support was placed under the back of the patient during the operation, and under the knees after the operation, there would be fewer complaints regarding backache from patients. Care should be taken both during and after the operation to avoid stretching the ligaments and the muscles of the back.

Dr. Doolittle thought that iodine was a good means of disinfecting and preparing the skin. The iodine could be made to penetrate the glands of the skin by the aid of electricity.

BATHS IN NERVOUS DISEASES.

By TOM A. WILLIAMS, M.B., C.M. (Edin.), Washington, D.C.

Member Corresp. Soc. de Neurol. de Paris; Member Corresp. Soc. de Psychol. de Paris; Member Assoc. Soc. Clin. Med., Mant., France; Neurologist to Epiphany Free Dispensary, etc.

THE indiscriminate prescription of hydrotherapy in neurotic states has done much harm; and yet no measure has a more beneficial influence than a bath when prescribed in the proper situation. The calming influence of the warm bath in agitated mental states extends even to the insane. It should not be forgotten, however, that the effect of a bath is a physical one, and it should never be used for its so-called "suggestive" effect. The systematic use of the cold douche in treating hysteria is a barbarism. It is true that a cold douche may stimulate the attention, but it does so towards the unpleasant sensation of the douche and not toward the matter which causes the morbid symptoms. It is thus, if anything, harmful to the patient's mind, and this is hardly compensated for by any benefit to his body. The cold bath is indicated in certain neurotic states of which indolence is a feature; but it should be prescribed with the definite indication of removing lethargy, and should be supplemented by other methods with the same end in view.

I need not enter into the eliminative effects of warm baths, for they are well known, and I am not satisfied that the application of dry heat by air or electricity has any particular advantages over hydrotherapy in

this or other respects, except, perhaps, when intense heat is required in a circumscribed region.

The use of the bath to minimize tension and strain of the muscles in the course of the meningitis of poliomyelitis must not be forgotten (report of New York Committee, Monograph Series, 1910); and the suspension of the body in water, too, greatly facilitates the first feeble movements during recovery from that disease.

SURGICAL HINTS

To avoid the formation of fistulas in subcutaneous or submucous abscesses in the anal region it is important, as advised by Kelsey, to open up the entire cavity, preferably by an incision in the direction of the radiating folds of the skin.

It is well to remember that pyuria, painful urination and irritable bladder may be due to non-gonorrhoeal purulent infection of the seminal vesicles. As shown by Belfield, such cases, particularly in elderly men, are readily confounded with cystitis, prostatitis or prostatic enlargement.

In the examination and treatment of furuncles all unnecessary handling and pressure should be avoided, because the germs are thereby forced into the surrounding parts and the tissues injured, with resulting extension of the purulent process and increased risk of systemic infection.

A tendosynovitis of the thumb or little finger should always be viewed with greater concern than if any of the other digits were affected. Owing to communication of the synovial sheath of the thumb with that of the flexor longus pollicis and the synovial sheath of the little finger with that of the deep flexor, the infection, if not promptly controlled, is liable to extend along the arm.

CURRENT MEDICAL LITERATURE.

MEDICINE.

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

CAMPHOR IN PNEUMONIA.

Weber (*Medical Record*) advocates the use of large doses of camphor in serious cases of pneumonia, having given 30 grains a day for three days, in the form of a 20 per cent. solution in oil of sweet almonds hypodermically, to a patient with high temperature, cyanosis, and delirium, and all the signs of a very acute pneumococcic invasion, with approaching cardiac failure. The result was good—all the signs improved, with strengthening cardiac action, and eventually the patient got well.

DIET IN ACUTE SKIN DISEASE.

In the *Medical Record*, January 28th, 1911, Bulkley relates his experience in the use of a very restricted diet, consisting of rice, bread and butter, and milk, in the treatment of acute inflammatory conditions of the skin. He quotes several cases of erythema multiforme of lichen planus, of dermatitis herpetiformis, of psoriasis, of urticaria, and of generalized eczema, which were very irritable and resisted ordinary treatment in which immediate and complete relief from the symptoms and disappearance of the disease occurred.

The author himself suffered from an acute attack of an irritable lesion with papulo-vesicular eruption of extremely troublesome character, which was diagnosed as dysidrosis, and which was resistant to all remedies known to the author until he confined himself to the aforementioned restricted diet, then the irritation and soon the eruption disappeared. Three to five days usually suffices, and it is not wise to keep a patient too long on this diet. The rationale seems to be the increased excretion of nitrogenous products consequent on the lessened intake.

NITRATES AND DIGITALIS IN ANGINA PECTORIS.

Herrick, in the *Journal of the American Medical Association* of October 22, 1910, refers briefly to certain fallacies concerning the use of nitrites and digitalis.

The nitrites have, especially of late, been held by some in less repute than formerly, because they fail completely in some instances to relieve or ward off the attacks. Others seem so convinced of their efficacy that, when in a case of supposed angina the nitrites fail to relieve the suffering, and to relieve it promptly, they conclude that they are dealing with something different from true angina. Now, the truth seems to be that nitrites in some cases give most prompt, marvellously prompt, relief. The testimony of many physicians is available on this point. It is hard to understand, then, how some good men—Romberg, for example—regard this remedy as either of no benefit or of very insignificant value, at least during a seizure. Unless convinced by repeated trials as to its usefulness in the attacks, no patient should fail to keep in his pocket either the pearls of nitrite of amyl or the pill or tablet of nitroglycerin, grain 1|100 to 1|50. Some attacks are surely cut short by the use of these remedies, and often the patient has a slight warning of the onset, and the timely use of the drug may prevent a paroxysm.

No matter how strong the prejudice against the use of digitalis in cardiac hypertrophy and general arteriosclerosis may be, no matter what may have been said against its employment in weakened myocardial states, there can be no question that in some cases of angina—not easily described—this drug does more good than all the iodides or nitrites.

Herrick's views may be summarized by making the statement as a series of negations:

1. With "truth," organic cardiovascular angina pectoris there cannot always be made out peripheral arteriosclerosis, cardiac hypertrophy, and high blood-pressure.
2. The finding of aneurism or lesion of the aortic valves does not exclude angina, but rather argues in its favor.
3. The attacks are not always few in number and brief in duration; they do not occur solely after exertion.
4. While the prognosis is grave, life is not necessarily limited to a few months.
5. The disease is by no means to be excluded because the symptoms are found in a woman, even in a nervous or hysterical woman.
6. The pain is not necessarily severe; it may be mild or even lacking; its radiation is variable.
7. The statement that the patient is always conscious, that he is always immobile and erect, must be modified so as to read "usually" instead of "always."
8. Eructations or vomiting during an attack do not argue conclusively against the cardiovascular origin of the angina.

9. It is not correct to look on the nitrites as of no benefit in relieving symptoms; nor, on the contrary, is one justified in concluding that a case unrelieved by nitrites is not angina.

10. Digitalis is not necessarily contra-indicated; it is often of very great value.

Closer observation of the atypical as well as the typical cases, with collocation of the results with those of anatomical and experimental studies, will lead to unifying knowledge concerning the pathogenesis of this disease, to greater precision in its recognition, and to more appropriate treatment.—*Therapeutic Gazette*.

EFFECTS OF LONG-CONTINUED HIGH BLOOD PRESSURE.

Long-continued high blood pressure produces a condition whereby there is leakage of cardiac energy.

The arterial tree in health maintains diastolic pressure in normal relation to systolic. In cases of long-continued high blood pressure there is failure of diastolic pressure to maintain its normal relation; therefore, there must be lessened elasticity of the arteries.

The increased strain on the heart is in accordance with the amount of diastolic failure.

In a series of thirty cases the average pulse pressure was 78.5 m.m., while a normal arterial tree will give a pulse pressure of 20 to 40 m.m. Therefore, there was a loss of 38 to 58 m.m. of high pressure.

It would seem that in these cases the high systolic pressure was in the nature of a compensatory act, as in order to maintain a diastolic pressure of 108.7 it was necessary to have a systolic pressure of 187.2.

There are signs of poor circulation, with high systolic pressure, if the diastolic pressure is relatively too low.

If attention were paid to the first indication of increased pressure and the cause removed, the inevitable bad results noted could be prevented.

When the pathological condition of failure of diastolic pressure has been established our efforts should be directed toward maintaining the compensation of the heart.

“606.”

In the *Medical Record*, January 14th, Lambert reports the results of the use of this remedy in several cases. The intramuscular method was used and the dosage varied from .35 grams to .6 for adults, propor-

tionately reduced for children, and he believes that a larger dose may, with efficacy, be used in the case of large, robust men. He quotes the therapeutic contra-indications as given by Ehrlich—signs of disease of the optic nerves, advanced disease of the heart or kidneys, tuberculosis, age or cachexia from any cause, and disease of the brain, even if of syphilitic origin.

Case I. was an infant 2 months, suffering from hereditary syphilis, with well-marked secondary signs, a fever of 102, enlarged liver and spleen, and positive Wasserman. Twenty-five milligrams were injected, with disappearance of signs in three weeks.

Case II., a man 32 years of age, suffering from indurated sores, of the lip from an infection nine years ago, enlarged glands, spirochetes present, and positive Wasserman. Two injections at intervals of three weeks; very little improvement.

Case III., a man aged 27, primary infection six years ago, mercurial treatment at intervals ever since and atoxyl treatment. Dactylitis and orchitis-tertiary lesions appeared. Injection of .5 gram.; some improvement in dactylitis; orchitis unchanged.

Case IV., a woman aged 27, primary chancre on the lip, eruption, adenitis spirochetes, and positive Wasserman. Injection of .5 gram.; in four days disappearance of rash and primary lesion.

Case V., a man aged 30, tertiary syphilis, nine months active and varied mercurial treatment, which has not prevented the appearance of the tertiary syphilides in the skin and ulceration, Wasserman positive, but spirochetes not demonstrated. Injection of .4 gram. was followed by prompt improvement of the lesions. While the time is too short to judge of permanent effect, there is the disappearance of one of the most obstinate of syphilitic lesions.

SULPH-HEMOGLOBINEMIA.

In the *Medical Record*, December 3rd, 1910, Clarke, of Utica, reports a case of sulph-hemoglobinemia, the first reported in America and the eighth in the literature.

The patient was a woman, aged 24, in 1909, when she first presented herself for treatment. She had never been robust, but a few days before she had noted that her lips were blue and her color ashen; she was weak, but did not feel ill; she was markedly constipated. Her color was so bad that people stopped her on the street and advised her to go home; she looked as if she were dying. Examination of the heart and lungs and of the blood failed to reveal any reason for the change. The blood withdrawn was of a rich chocolate color, and, on spectroscopic examination,

showed the characteristic band of sulph hemoglobinemia, corresponding to that given by a solution prepared synthetically.

After admission to the hospital she was kept under observation for three weeks, and active purgation kept up, which caused a marked improvement. After going out the constipation reappeared and the changed color returned, showing that the condition was in a sense idiopathic.

The differential diagnosis must be made first from conditions of heart or lung trouble, causing cyanosis, and then from methaemoglobinemia, which causes a similar appearance, and is probably more common. The dilution of dilute ammonium sulphide to the blood solution in methaemoglobinemia causes disappearance of the dark band in the red, but does not do so in this condition.

There was nothing in family or personal history of this case to explain it. The patient was a seven-months' child and a "blue baby," and during her life had a variety of troubles and illness, but nothing that had any specific relation. The history of cyanosis, so far as she knew, extended over a month, during which time the condition had appeared and disappeared twice.

THE GENERAL TREATMENT OF DIABETES MELLITUS.

In *Folia Therapeutica* for January, 1911, there appeared an article on the above subject by Nestor Tirard, M.D., F.R.C.S., senior physician to King's College Hospital. He sets out by stating that this disease cannot be treated on any routine manner. The treatment does not consist merely in reducing the glucose in the urine, modifying the diet, and giving some drug. Experience shows that routine treatment is bound to be a failure. The presence of glucose in the urine is only one of the features of the disease.

In an ordinary case of the disease the person should be placed in bed for a few days' rest, and observation made of the symptoms. During this period there should be no change in diet, and no drugs should be ordered. When the total amount of urine per 24 hours is known and its specific gravity ascertained, together with the weight of the patient, the absence of serious symptoms and acetone or diacetic acid, it will be possible to construct a dietary. It must always be remembered that it is dangerous to change the dietary too abruptly. To shut off the carbohydrates too suddenly may cause drowsiness or coma.

After a few days' observation remove from the diet all sugar. The effect of this should be noted on the glucose in the urine. The rest may cause constipation, and this must be corrected by a suitable laxative.

The next stage of the treatment may now be commenced by the gradual reduction of all the carbohydrates. This stage calls for close watchfulness with regard to the symptoms. The urine must be tested daily for acetone and diacetic acid. The removal of the carbohydrates should be accompanied by some substitute for bread. There are a number of these, and patients usually do best when several of these substitutes are employed. To overcome the tendency to wasting, cream and butter should be given as freely as the digestion will stand. In some instances of digestive trouble milk may be allowed fairly freely. The presence of lactose must be looked for and an increase in the glucose may demand a diminution in the amount of milk.

Persistent acidity of the urine is a feature of these cases. To lessen this the author of the article advises the administration of sodium bicarbonate in fairly large doses three or four times a day. It is almost impossible to render the urine alkaline, and on the omission of the alkali the urine speedily becomes highly acid again.

With regard to the use of opium, morphine, and codeine, Dr. Nestor Tirard is not too sanguine. He contends that these must be employed with great care, as drowsiness may result. Some contend that by these drugs all the glucose can be removed from the urine after the due regulation of the diet. Dr. Tirard, however, utters the foregoing caution.

Dr. Tirard speaks in high terms of the value of sodium salicylate and acetyl-salicylic acid. By the administration of these drugs the glucose may disappear altogether and remain out of the urine even when the patient is allowed a few ounces of bread, and after the salicylate had been discontinued.

When the patient has made considerable improvement a moderate amount of exercise may be permitted in the open air.

Many diet lists have been prepared. It is well to allow as varied a dietary as possible consistent with the condition of the urine. Should there be any tendency to return or increase in the glucose found in the urine, or loss of weight, the closest watch should again be placed upon the patient and the treatment, as already outlined, commenced anew.

In the diabetes of those over mid-age and in the elderly it is not necessary to restrict the diet so severely as in the case of the young. In these cases it may be sufficient to remove the sugar and part of the carbohydrates from the diet. There is not much need for drugs in such cases. Care must be taken not to cut down the carbohydrates too severely, as the patient may lose flesh and strength by such treatment.

In some cases of diabetes there may also be albumen in the urine. This may call for some care in the dietary. It is not, as a rule, necessary to restrict the amount of proteids as the meats in the diet. This is only called for in acute cases of kidney trouble along with the glucosuria. In

cases of albuminuria with the diabetes it may be necessary to act more freely on the bowels with some saline.

Elderly diabetics do best when allowed to follow some occupation. They should, however, be freed from worry as far as possible. A holiday may do good.

As the amount of sugar loss is reduced the sense of fatigue diminishes on taking exercise. The effect of exercise should be watched closely on the feeling of fatigue and the amount of glucose in the urine. In some instances a carefully regulated amount of exercise lessens the amount of sugar in the urine.

With regard to purgatives, salines usually give the best results. They must be employed if there is the least reason to fear acidosis. Various natural waters may be given. Mineral water baths are also helpful. Large doses of salines, such as Hunyadi Janos water, has been of very marked value, especially if there be urgent symptoms. This treatment has been able markedly to reduce the amount of sugar.

Fruits in variety, especially those low in sugar qualities, should be allowed. In cooking these sugar should not be used. The starch of potatoes may agree much better than that of bread. Oatmeal suits some cases.

No matter what the diet may be, it is necessary to watch the amount of urine voided daily, and the amount of sugar contained in it. A mistake is often made in supposing that a sudden fall in the amount of sugar is a favorable indication. It may precede the rise of acetone and diacetic acid and the onset of coma. This danger must never be forgotten.

When facts are given to lessen the loss of weight, care must be taken to avoid the production of dyspepsia, which may in turn cause the formation of acetone and diacetic acid.

Increase in weight, with a feeling of wellbeing, is a favorable condition. A sudden fall of glucose demands the closest watchfulness, for fear of coma. This condition may require the liberal use of carbohydrates for a time as a means of reducing the acidosis, or diacetic acid.

On the slightest fear of acidosis, sodium salicylate and sodium bicarbonate should be given freely, the quantity being determined by the effect on the alkalinity of the urine.

SURGERY.

Under the charge of H. A. BEATTY, M.B., M.R.C.S., Eng., and A. H. PERFECT, M.D., C.M.,
Surgeons to the Toronto Western Hospital.

CANCER OF THE BREAST.

Ablation, complete and thorough, is, at least up to the present, the only rational treatment of cancer of the breast. But in certain circum-

stances, writes Dr. Thomas in the *Journal des Praticiens*, where the tumor has contracted deep adherences and the supraclavicular ganglions are taken, in certain varieties of cancer of rapid evolution, as in acute carcinomatus mastitis, in scirrhus of the teguments where the general condition is bad or the patient too weak or too old, an operation is counter-indicated.

There remains but a palliative treatment addressed to the pain, the hæmorrhage and the foetid secretion of the ulceration.

Against pain the list of agents proposed is very long, and it is curious to say that a drug that will effectually relieve one patient will have no effect on another, so that it is necessary for the physician to have a certain number of these sedatives to provide for eventualities.

Applications of compresses of very hot water, and frequently renewed, is one of the best means at our disposal to relieve pain. Cocain in ointment or solution is also very efficient:

Chloride of cocain, 10 gr.
Boric acid, 30 gr.
Vaselin, 5 dr.

or

Chloride of cocain, 15 to 60 gr.
Water, 2½ oz.

Resorcin possesses the advantage of being both antiseptic and sedative:

Resorcin, 1 to 2 dr.
Water, 1 quart.

or

Resorcin, 15 to 150 gr.
Vaselin, 3 oz.

Hemlock formerly enjoyed a great reputation, and was prescribed both externally and internally.

Extract of conium, 30 gr.
Vaselin, 1 dr.

or

Extract of conium, 2 gr.
Hydrobromide of quinine, 3 gr.
Excipient, q. s.

For 1 pill, 2 to 6 daily.

In some cases the pain is relieved by exalgin, 5 to 8 grains twice a day; aspirine, 10 gr. three times a day; pyramidon, 6 to 12 gr.; antypyrin, 30 to 60 gr. in the 24 hours, bromidia, one or two teaspoonsful at night.

But no drug can be equalled to opium and its derivatives. Morphia by the mouth or subcutaneously renders valuable service.

Simple hæmorrhage may be treated with application of ice or anty-pyrin in solution 50-100, or ferripyrim 20-100, or painting with the adrenaline solution (1-1,000), but this latter should be used with precaution on account of possible accidents. In grave hæmorrhage, one or two injections of ergotine may be given while the patient will take a teaspoonful every five minutes of

Sol. of adrenaline, 10 to 40 drops.

Water, 2 oz.

Locally oxygen water will be used to clean the ulcerations, and compresses of sterilized gauze, wet with the following solution, may be applied:

White gelatin, 2 dr.

Chloride of sodium, 2 dr. .

Corrosive sublimate, 8 gr.

Water, 3 oz.

The treatment of fœtid discharge is best met with by such disinfectants as permanganate of potash, 1-500; formol, 1-1,000; or chloral, 1-100.

Antiseptic powders, such as salol, aristol, salicylate of bismuth, are frequently employed, or such compositions as the following:

Iodoform, 3 dr.

Sulphate of quinine, 1 dr.

Charcoal, 1 oz.

Ess. of peppermint, 10 drops.

or

Iodoform, 2 oz.

Sulphate of copper, 3 dr.

Morphia, 1 dr.

A powder which renders good service in the dressings of ulcerated cancer is:

Aristol, 1 dr.

Tannin. 4 dr.

Antipyrin, 2 dr.

Silicate of magnesia, 3 oz.

—*Medical Press and Circular.*

ABDOMINAL INJURIES.

H. H. Sherk, Pasadena, Cal. (*Journal A. M. A.*, March 11), remarks on the frequency of injuries of the abdominal viscera without external lesions, and emphasizes their importance. He notes at length

the irregularities of the symptoms and the necessary difficulty in diagnosis, reviewing also the method of infliction of such injuries and the liability to and mechanisms of the lesions of the different abdominal organs. He insists on careful examination in every such case and continuance of the observation over a period of several days or more. No matter how slight the symptoms referable to the abdomen, the possibility of visceral injury must be considered, regardless of the point of injury or the external force employed. The degree of violence has often no relation to the extent or severity of the injury to the internal organs, and an investigation as to the exact details of the accident or violence is essential for the diagnosis. Blows, kicks, and crushing violence cause most of the intestinal injuries; compressive force is the most common cause of liver trauma, and concussion is responsible for most of the splenic ruptures. The presence or absence of peristalsis is of the utmost diagnostic and prognostic importance, and has not, he thinks, been duly appreciated. The early presence of a peristalsis indicates that the abdomen or its contents has received some shock or violence, and its persistence or recurrence is a conclusive proof of internal or visceral injury. Any decided lessening of peristalsis is a danger signal if it occurs more than three or four hours after the injury. Active peristalsis, on the other hand, is always encouraging. There are no pathognomonic symptoms of abdominal injuries, most of them being common to all injuries, but in general progressively increasing shock indicates trauma of the solid organs, while early symptoms of peritonitis follow that of the stomach or intestines. Pain as an initial symptom is important only as calling attention to the fact that an injury may have occurred, and, possibly, by its location, showing the possible site of the injury. Shock has no diagnostic value except by its progress or course, which is of great importance. Sherk emphasizes the point that an exact diagnosis, though highly desirable, is not absolutely necessary. The main thing is to early recognize the probability of visceral injury and act accordingly. The analysis of statistics he gives points out that the better course is to do an exploratory operation rather than to wait in doubtful cases till a more positive diagnosis can be made. A bibliography of the general subject and an extensive list of reported cases is appended.

NEW METHOD OF APPROXIMATING THE APONEUROSIS OF THE EXTERNAL OBLIQUE IN OPERATING FOR INGUINAL HERNIA.

Dr. A. McLean (*J. Mich. S. M. S.*, Nov., 1910) divides the aponeurosis in the direction of its fibers about one and a half inches above

Poupart's ligament. After liberating the hernial sac it is ligated as far possible toward the abdominal end, and the operation proceeded with according to the Ferguson method. The technic of closing the aponeurosis of the external oblique is as follows: The muscle is loosened from the underlying structures for about one and a half inches. T-shaped forceps are now applied to the margins of the upper flap, pulling it upward. Two blunt-pointed forceps, two inches apart, are plunged through this upper flap about one and a half inches from its margin. With these forceps the margins of the lower flap are caught, pulled upward, and held there until a row of interrupted sutures is placed along the margins of this lower flap. These sutures are best applied with a short, round, sharp curved needle. They pierce, first, the upper flap about one-half inch from its margin; second, the lower flap at its margin; and, thirdly, again appear through the upper flap. This row of sutures having been placed, the margins of the upper flap, to which the T-shaped forceps have been attached, are stitched to the lower flap about one and a half inches from its margin. This row of sutures, if the original division of the aponeurosis of the external oblique has been made at the proper point, will coincide with the upper shelf of Poupart's ligament. If more convenient to the operator, this arrangement may be reversed, in which case the blunt-pointed forceps would pierce the lower flap, catching the margins of the upper one and pulling it under the lower one. The author believes that the fortification or reduplication of the aponeurosis corrects, as it were, the faulty anatomical construction, which, in the first place, is the cause of hernia.

DANGER OF FORCIBLE STRETCHING OF THE SPHINCTER ANI.

Dr. E. Melchior (*Münch. med. Wochensch.*, No. 38, 1910) reports a number of cases observed in Professor Küttner's clinic, in which, after operation for anal fistula with complete division of the sphincter, more or less incontinence resulted. This applied particularly to fluid stools and flatus, and no improvement was noted after many years. In other cases, however, in which the sphincter had not been divided, incontinence of various duration, up to five years, remained, and this led the author to assume that some lesion of the sphincter had occurred from the stretching preparatory to the splitting of the fistula. As such unpleasant results are observed only in certain cases, they may justly be attributed to too forcible efforts at stretching. He, therefore, concludes that this procedure is not free from the risk of permanent incontinence, which can probably be positively prevented, first, by avoidance of forcible manipulation, and, second, by their performance during deep anesthesia.

OPHTHALMOLOGY AND OTOTOLOGY.

Under the charge of G. STERLING RYERSON, M.D., L.R.C.S., Ed., Ophthalmologist Toronto General Hospital, and F. C. TREBILCOCK, M.D., Ophthalmologist, Toronto Western Hospital.

ON GLAUCOMA.

The condition of increased intra-ocular tension is one of the comparative rarities in Canadian medicine, for one meets many physicians of long experience who will say that they have never seen a case in practice. Occasionally, however, one is almost convinced that it is not so rare as we suppose, and the finding of three cases in one week not long ago has made me think it worth while to call the attention of the physician again to this subject.

The remote etiology of the condition we designate glaucoma is still obscure, but the immediate physical state is one of increased tension in the unyielding globe. The subjective symptoms are all dependent upon this one factor—pain, failing vision, halos around lights—and the objective signs are also referable to it—conjunctival congestion, steamy cornea, enlarged pupil, shallow anterior chamber, hard eye, and perhaps cataract.

We believe that the profession is generally imbued with a wholesome fear of glaucoma; to some it is a sort of nightmare. The physician knows that, apart from the torture it causes, its end is likely to be blindness, and in the majority of cases both eyes will be affected. No wonder, then, his dread!

Let us examine now very briefly the symptoms in detail. The pain is easily understood; the unyielding sclerotic is the backing against which the intra-ocular nerves of sensation are pressed, and the pain produced is generally referred to the brow and temples. The failing vision may be accounted for in three ways—the pressure upon the retina reduces its sensitiveness to light stimulation, the nutrition of the lens may suffer interference and early lens change be induced, or the anterior tunics, becoming oedematous, will cause the steamy cornea. The halos around lights are due to the corneal oedema, and are hardly to be distinguished from those seen where the cornea is bathed in mucous discharge as often found in a simple conjunctivitis.

Regarding the objective signs: The conjunctival congestion, most marked around the corneal rim, is due to the internal pressure upon the anterior choroidal venous channels interfering with the egress of blood; the congestion is, therefore, passive, not active, and yet is often hard to distinguish from the active congestion of iritic inflammation. The corneal oedema, showing as a steamiess where there should be perfect transparency, and which cannot be removed by washing out the conjunc-

tival sac, is due to the same passive congestion which causes the circum-corneal flush. As has been hinted, it is important to eliminate an apparent steamingness which is due to mucus only. The large pupil is an almost constant sign, and a very important diagnostic point. The eye appears often as if the vitreous were attempting to push the lens through the pupil, and the latter dilating to allow it. The reaction to light may be very feeble or lost altogether (this will depend, in part, upon the sensitiveness of the retina). The relative size of the pupils may make the diagnosis between glaucoma and irido-cyclitis.

The depth of the anterior chamber when compared with that of the other eye will often help our decision. Normally the iris stands in a plane at right angles to the antero-posterior diameter of the globe, but if it be pushed forward at the pupillary edge, so as to be shallow-funnel-shaped, and so reduce the depth of the chamber, it hints at increase of tension. The hardness of the eye, if the tension be much above normal, will be easily distinguished by the finger-tips. Any pressure upon the globe will be painful, but will hardly suggest an inflammatory state in the presence of the other symptoms. There are doubtless many cases of glaucoma where the tension is not raised enough to be recognized by the unpractised finger, but will be shown up by one of the various mechanical tonometers. Such will, however, likely show other symptoms which will arouse the suspicion of the attendant.

Cataract is only an occasional complication of glaucoma, and then it is usually late in the case. When it is coincident it is often impossible to decide whether an increasing glaucoma has caused the lens-change or a rapidly swelling cataractous lens has raised the tension. But such puzzling cases are so rare that they need not be discussed here.

A word regarding the etiology of glaucoma. Upon one point nearly all the conflicting theories agree, viz., a sclerosis in the roof of the canal of Schlemm—that is, the ligamentum pectinatum iridis, which arises in the perimeter of the posterior layers of the cornea and, roofing the canal, passes backward, to be lost in the root of the iris, or to form an anterior origin for the ciliary muscle. The aqueous, under normal conditions, drains, in part at least, through small stomata in this ligament into the canal of Schlemm, and any fibrosis here may easily interfere with that process. Of late years Thomson Henderson has emphasized the part the iris crypts play in drainage of the aqueous, so that any atrophy of the iris which would destroy the crypts, or any iris contraction which would close the crypts would predispose to glaucoma, especially where the previously-mentioned cause also existed.

The idea generally accepted regarding an increase of tension subsequent to atropine instillation has been that the peripheral withdrawing of the iris and the contraction of the ciliary muscle mechanically closed

the filtration angle of the anterior chamber (Priestly Smith), probably some sclerosis also existing. Glaucoma is relatively more frequent in the long-sighted, where the ciliary muscle is generally hypertrophied. However, one cannot but heed the possible result of the closure of the iris crypts in such cases.

Whatever relative importance one may place upon these two mechanical causal factors, the fact remains that a sharp contraction of the pupil would, in a measure, neutralize both of them, for it would open again the filtration angle and also the iris-crypts, and in many cases such a course brings quick relief of symptoms. One can readily see that cure of atrophy or fibrosis in the crypts, or of sclerosis in the pectinate ligament are beyond our art.

The other element that has an important place in etiology, especially of acute attacks, is the local blood pressure. Henderson contends that the intra-ocular pressure varies *pari-passu* with the intra-cranial pressure, and draws an exact parallel between the bony cranium and the fibrous eyeball. His ideas are not fully corroborated as yet, but it is a long-recognized clinical fact that glaucoma frequently follows a state of high mental excitement, a very suggestive point from a therapeutic standpoint.

F. C. TREBILCOCK, M.D.

(*To be continued.*)

LARYNGOLOGY AND RHINOLOGY.

Under the charge of PERRY G. GOLDSMITH, M.D., C.M., Fellow of the Laryngological and Rhinological Society of Britain; Assistant Laryngologist and Rhinologist, Toronto General Hospital.

SOME PRACTICAL POINTS IN NOSE AND THROAT CASES.

In February 25th number of *The Medical Times* appears a report of a clinic given by Mr. Gay French on some practical points connected with the nose and throat.

Case I was of a youth who had been completely cured of recurring attacks of asthma by a nasal operation. Mr. French, after introducing and explaining the case, went on to say that he did not think cauterizing the septum would cure all cases of asthma, but the result was good in about 20 per cent. The reason why nasal operations were so beneficial in asthma was because the mucous membrane of the nose was supplied by branches of the fifth nerve. There was a direct vagus, so that sensory impressions from the nasal mucous membrane were transmitted to the

medulla, and thence to the vagi and its branches. The patient in question had the following conditions:

1. Deviation of the septum.
2. Pressure on the septum by the middle turbinal.
3. Swollen and water-logged turbinals.

Since the operation the patient has been quite free from any attack of asthma. The *modus operandi* of nasal asthma was that the fifth nerve internasal terminals were stimulated in some way. Centripetal impulses were started, and these were received by unstable nerve centres and passed thence to the pneumogastric filaments.

Case 2 was that of a man, aged 65 years, who two years ago had a gumma of the palate which broke down and formed an ulcer. Five months later the patient complained of a lump in the neck, which proved to be an enlarged gland, caused by the ulcer, which, on examination, was found to be an endothelioma. After forty hours' exposure to radium this ulcer healed.

"Radium," said Mr. French, "is not much good apart from its local action." It acts most beneficially upon slow-growing endothelioma. The endothelioma, as all know, is a growth of the connected tissue type, or sarcomata. It may affect the pleura, peritoneum, membrane of the skin or brain, or it may be found in the walls of the blood vessels, serous membrane, lymph glands, and elsewhere. The historical characters of the tumor are that it consists of more or less tubular or acinous-like collections of endothelial cells.

Case 3 was that of a patient suffering from frontal sinus suppuration. In this case there was orbicular cellulitis, with œdema. The lecturer here pointed out that in acute inflammation of the frontal sinuses there was great danger of acute osteo-myelitis of the skull.

Case 4 was also that of a man with frontal sinus suppuration. "Again I repeat," said Mr. French, "that one of the dangers of acute frontal sinus suppuration is acute osteo-myelitis, which leaves the skull like a cribriform plate." Another complication is septic thrombosis. In this case lumbar puncture showed the presence of pus cells in the cerebro-spinal fluid. The treatment was soothing and antiseptic—hot menthol vapor and poultices, in order to get the conditions in a quiet state.

Case 5 was that of a girl who had had the double radial frontal sinus operation. The result was in every way satisfactory, and no disfigurements whatever could be detected. The sinus was washed out afterwards by a solution of peroxide of hydrogen (5 per cent.), by means of a spray.

Case 6 was that of a man aged about 40, who presented characteristic specific scar of the soft palate. "This scarring," said Mr. French, "looks like the congested appearance you get after the removal of the tonsil." The treatment had been mercury, iodide of potassium, and an intravenous injection of "606." The beneficial effects of the latter were marvellous. The condition cleared up almost at once.

Case 7—a case of tubercle of the larynx. "It is," said the lecturer, "usually the rule to speak of tubercular laryngitis as a primary and secondary infection of the larynx by the tubercle bacillus, but I will at once say that in my opinion the disease is always secondary and never primary. I doubt if primary disease of the larynx due to tubercle exists. "Now," continued Mr. French, "when a student is asked to describe the characteristic appearance of the mucous membrane in tubercle of the larynx he usually states that every pallor is the rule." Allow me to tell you that this is not so, for in six cases out of ten brick-red condition of the mucous membrane is the distinguishing character, not only at the commencement, but in the later stages. The appearance seen may be enumerated as follows:

1. Brick-red congestion of the mucous membrane.
2. Pyriform swelling of the arytenoid cartilages.
3. Turban-like swelling of the epiglottis.
4. Finally the mouth-eaten appearance occurs when ulceration eats into the affected parts.
5. The inter-arytenoid ventricular bands and cords present the shallow, mottled, mouse-like appearance.

It is usually the laryngeal side of the epiglottis which becomes first affected, showing that infection occurs from below and not from above, and this in itself points to secondary infection from the lungs. "The cause of hoarseness in these cases," said the lecturer, "is the presence of granulations preventing complete adduction of the cords." The treatment of the case would be as follows:

1. Moist air.
2. Avoidance of dust.
3. Absolute silence.
4. An injection of menthol with guaiacol in olive oil.
5. Formalin, 2 per cent., as a vapor.
6. Cauterization.
7. Removal of a piece of the epiglottis.
8. Injection of guaiacol.

For the relief of pain and dysphagia equal parts of anaesthesin and arthoform, inhaled by means of a glass tube, gives immense relief.

Later on, where ulceration is present, the following preparation painted over the parts gives satisfactory results:

Lactic acid, 50 parts.
 Carbolic acid, 10 parts.
 Formalin, 7 parts.

As to the use of tuberculin in these cases, Mr. French remarked: "On the whole, I think its administration in tubercular laryngitis is a failure, and I will tell you why: The infection is really a mixed infection, and not a pure infection entirely due to the tubercle bacillus; hence the failure of tuberculin to do any permanent good."

PERSONAL AND NEWS ITEMS.

ONTARIO.

Dr. C. E. Hill, for some in New York, has located in Toronto.

Dr. A. M. Clark has removed from Dunnville to Toronto.

A recent bacteriological test of Toronto's water showed that it was badly infected with the colon bacillus.

Dr. K. C. McIlwraith had a very pleasant holiday in the South, visiting Washington and Virginia.

Dr. B. L. Riordan, of Toronto, has recovered from a rather severe attack of typhoid fever.

Dr. John Caven has been spending a couple of months in Florida, and Dr. McDonagh has had a lengthy holiday in the Barbadoes.

Dr. W. H. Pepler, Toronto, has been chosen to represent Trinity University on the Medical Council.

Mr. J. B. King, Dr. E. E. King's father, died on 25th March, at the age of 75. He was secretary of the I.O.O.F.

The University of Toronto has received a gift of \$5,000 from Mrs. Marfleet to found a lectureship in memory of Pearson Kirkham Marfleet.

A deputation organized by the local Council of Women waited on Sir James Whitney and Hon. W. J. Hanna recently to urge that the Government make proper provision for the care of the feeble-minded.

The Hospital Board for the Hamilton Hospital has decided to incorporate the Training School for Nurses, in order to give the certificate a better standing in the United States.

The Ladies' Board of the Infants' Home, Toronto, presented Mrs. Jordan with a gold watch and chain on her retirement after eighteen years of faithful service.

The local Board of Health for Toronto has been discussing the advisability of making public wards of the Isolation Hospital free to all. Dr. Hastings is in favor of this.

Thirteen cases of smallpox are quarantined in an apartment house in Ottawa. A small amount of prevention by way of vaccination would have made these people happy.

To the deputation which waited upon Hon. W. J. Hanna regarding a home for the feeble-minded the Minister made a very favorable reply. He said that "the care of the feeble-minded was a question marked and underlined for attention in the near future."

Dr. R. F. Preston, M.P.P., was banquetted on the evening of the 13th March by his fellow-members in the Ontario Legislature. He was presented with a heavy gold watch chain, with diamond-studded monogram locket, and a gold ring with splendid sapphire setting.

Dr. Rowland B. Orr, of Toronto, has been appointed Director of the Provincial Museum, in succession to the late David Boyle, the founder of the museum. The salary is \$1,800 a year, but will not prevent his carrying on his practice.

An agitation is on foot in Hamilton for a new hospital site. The doctors are urging that a block of land of about twenty acres be secured. The city has already voted \$35,000 towards a site. It was suggested that Dr. Holmes, of Cincinnati, be asked to report on the matter.

It is understood that the M. H. O. for Toronto will issue a monthly bulletin on health topics. It will deal with prevalent diseases and their prevention. An issue of 40,000 will be distributed each month through the schools and colleges of the city.

The Canadian Association for the Prevention of Tuberculosis will hold its annual meeting on May 18 and 19, in London, Ont., when the splendid new Queen Alexandra Sanatorium should prove of special interest.

The Board of Control of Toronto unanimously approved of Senator Belcourt's bill, and praised the Senator's attempt to prevent the pollution of navigable waters with sewage. This bill will make it necessary to sterilize sewage before it is permitted to enter open waters.

A canvass of all the physicians in Ottawa recently fixed the number of typhoid patients in their care during the present epidemic as about 1,200. The people of Ottawa are very indignant at the want of energy displayed by the local department of health. A citizens' committee has been formed.

A new wing has been added to the Royal Victoria Hospital in Barrie as a memorial to the late H. H. Strathy, K.C., who was formerly president of the hospital board. The wing cost \$12,500, and is the gift

of his widow and son, Gerald B. Strathy. The hospital has now accommodation for 52 patients.

A short time ago three cases of smallpox of severe type were reported in the village of Maberly, in Lanark County. None of the local physicians would take charge of the cases. Dr. J. W. S. McCullough, secretary Provincial Board of Health, had some difficulty in arranging for their attendance.

Strong objections have been raised in Toronto to the treatment of the water by chlorine. It has been claimed by some that the water is injurious to plants and to the health of the people. Dr. Hastings has shown that there is only 1 part of chlorine in 3,000,000 parts of water. If a man drank forty gallons of water he would only take a medicinal dose of chlorine.

The annual meeting of the Toronto Victorian Order of Nurses was held a short time ago. There had been 1,429 patients visited, there were 583 new-born infants, the nurses had made 10,394 visits, and 403 doctors had employed Victorian nurses. The receipts had been \$6,595.84 and the disbursements \$6,555.84. The number of subscriptions had increased from 1,009 in 1909 to 1,759 in 1910. Mr. W. J. Gage gave \$500 towards a home.

On the work performed by the school nurses during February in Toronto the superintendent, Miss Lina L. Rogers, R.N., has reported to Dr. Struthers, chief medical inspector, as follows: Inspections, 43,089; instructions, 1,624; treatments, 440; eye diseases, 1,231; ear diseases, 189; skin diseases, 183; pediculosis, 806; carious teeth, 10,142; visits to homes, 1,705; visits to schools, 842; visits (miscellaneous), 41; exclusions, 34; teeth filled, 36; glasses fitted, 12; tonsils removed, 12.

QUEBEC.

The fourth annual meeting of the Sanitary Service was held a short time ago in the city of Quebec.

Dr. F. J. Tees has resigned his position of medical superintendent of the Montreal General Hospital, and has been succeeded by Dr. Shanks.

The Montreal General Hospital during 1910 treated 3,586 patients. There were 272 deaths. The daily average was 205 patients. There were nearly 14,000 outdoor patients.

Senator De Viber, M.D., has induced the Dominion Government to make a grant of \$500 for the purpose of investigating the causes of typhoid in lumber and railway construction camps.

The Council of the Medical Faculty of Laval, Montreal, has added Professor Harwood to its numbers. He is an able surgeon on the staff of Notre Dame Hospital, and speaks fluently both French and English.

Following the report submitted by Dr. J. E. Laberge, chief of the civic contagious disease branch of the Board of Health for Montreal, the controllers have decided to rigidly enforce the by-law calling for the vaccination of all school children and all employees engaged in manufacturing and other industrial establishments in that city.

The medical faculty of McGill announces that an extended course of study for graduate students will be given during the coming summer. Beginning on Monday, June 12th, the course will be continued for a period of six weeks, during the first half of which the work will be conducted in the Montreal General Hospital, and during the second half in the Royal Victoria Hospital.

A record financial report of the Victorian Order of Nurses in Montreal shows receipts for the year of \$40,713 and expenditures \$36,000. The nurses made 5,429 visits and attended 8,336 cases, of which two-thirds were non-paying. They answered 2,420 night calls and nursed 326 operation cases. The new officers are: President, Dr. Roddick; vice-presidents, Dr. Egar Hill and J. H. Sherrard; secretary, Dr. Patch; treasurer, A. M. Crombie.

Dr. A. N. Worthington, M.P. for Sherbrooke-County, was stricken with apoplexy recently, and is in a critical condition. Col. Worthington is a native of Sherbrooke, and is in his fiftieth year. His wife is a daughter of H. H. Cook, ex-M.P., of Toronto. He is a surgeon to the Sherbrooke hospital and a governor of the College of Physicians and Surgeons of Quebec. He was formerly sergeon-major of the 53rd Regiment. He served in the field hospital during the Riel Rebellion, was brigade surgeon-major in the Canadian Field Artillery in South Africa in 1900, and, as brevet lieutenant-colonel commanded the Canadian Field Hospital in the Transvaal in 1902. He was first elected to the House in 1904.

The public bequests of the late Chas. Byrd, of Montreal, are as follows: Ten thousand dollars to the Montreal General Hospital for the endowment fund, subject to the hospital paying interest thereon at 4 per cent. to Mrs. Woods, sister of the deceased; \$5,000 to the Protestant Hospital for the Insane at Verdun, for the endowment fund, subject to paying interest at 4 per cent. to Mrs. William Mackclair, sister of the deceased; \$10,000 to the Montreal Protestant House of Industry and Refuge at Longue Point, to be used as the board of management shall direct; \$5,000 to the Irish Protestant Benevolent Society, for the endowment fund; \$2,500 to the Western General Hospital, Montreal; \$2,000 to the Alexandra Hospital, Montreal, for infectious diseases; \$2,000 to the Boys' Home, Montreal; \$1,000 to the St. Patrick's Society, Montreal.

MARITIME PROVINCES.

For a considerable time there has been much dissatisfaction with the management of the Victoria General Hospital in Halifax. This institution is a Government one, and has been administered by the Government. There has been a strong feeling that politics played too important a part in the making of appointments. Whether due to this or not, there has also been a good deal of ill-feeling on the staff. Recently the Government has appointed a strong commission to manage the hospital, and this may prove a happy solution of the troubles that have interfered with the peace and pleasure that should reign in the working of such an institution.

WESTERN PROVINCES.

A general vaccination order has been issued for British Columbia.

Medical inspection of schools has been adopted in Brandon, Man.

Winnipeg has purchased the private hospital of Dr. Beath, and will use it for an isolation hospital.

An effort is being made to establish a suitable memorial of the late Dr. Lundy, of Portage la Prairie.

Dr. Donaldson, of Vancouver, has been appointed one of the house physicians to St. Thomas' Hospital, London.

FROM ABROAD.

William Worrall Mayo, of Rochester, Minn., died recently, at the age of 91. He was the father of the Drs. Mayo.

Famine and the plague are causing great loss of life in China. It was estimated that at least 30,000 had died up to the first of March.

The London County Council is spending this year \$200,000 on medical inspection of schools and the treatment of children.

George L. Fox, of Brooklyn, leaves to the charities of that city \$280,000. In his donations no discrimination because of creed is shown.

The Battersea Council has decided that the statue of the "Brown Dog" should be destroyed. This statue was erected some years ago by the anti-vivisectionists. It was the cause of several riots.

The Presidency of Madras, India, has decided that the memorial to the late King-Emperor Edward VII. shall be in the form of a sanitarium for the relief of those suffering from tuberculosis.

During the month of February there were 88,498 deaths from the plague in India. The disease is overlooked in India because it is so common.

Dr. Winford H. Smith has resigned the medical superintendency of Bellevue and allied hospitals and has accepted the position as medical superintendent of Johns Hopkins Hospital.

A short time ago the University of Edinburgh was presented by the friends of Professor John Chiene with a handsome portrait of him, and a sum of money to found a medal in his honor in surgery.

Dr. Alston, in Trinidad, and Dr. Strong, in the Philippine Islands, have employed Salvarsan in the treatment of yaws, with similar results to those obtained in the treatment of syphilis.

The Lannelongue prize of £200 and a gold medal founded a year ago by Professor Lannelongue, of Paris, has been awarded to Sir Victor Horsley for his work in surgical science.

The birth-rate in Britain for 1910 was 24.8 per 1,000. This is the lowest on record for the country. The death-rate was 13.4, again the lowest known for Britain.

The wife and daughter of the late Robert Koch intend publishing a complete edition of his writings, under the editorship of Professors Schwalbe, Gaffkey, and Pfuhl.

Professor Von Braun, the distinguished gynecologist of Vienna, died recently, at the age of 82. He was a colleague of Billroth, Skoda, Rokitansky, and Kaposi.

The commission dealing with tuberculosis for the State of Rhode Island estimates that the thousand deaths due to this disease is a loss to the state of \$8,373,750 each year.

In Australia there are medical departments in connection with the Universities of Sydney, Adelaide, Melbourne, and Queensland. In those of Sydney and Adelaide a five years' course is in force.

The British Medical Association meets this year in Birmingham on July 25, 26, 27, and 28. Dr. R. Saunaby is the president. The address in medicine will be given by Dr. Byron Bramwell and the address in surgery by Mr. Jordan Lloyd.

The Stockholm Medical School celebrated its centennial anniversary recently. A number of honorary degrees were conferred on foreign scientists. Five of its staff are on the board which awards the Nobel prizes.

The International Congress on Hygiene and Demography will meet in Washington, D.C., in 1912. Dr. Henry F. Walcott, of Cambridge, Mass., will be president and Dr. W. H. Welch, of Johns Hopkins, chairman of the Executive Committee.

Dr. Fraser, who has been working on beri-beri in the Federated Malay States, reports that the disease is caused by certain varieties of rice. When parboiled rice was used the disease did not occur, but it did when white rice was consumed.

Mrs. Whitelaw Reid, wife of the American ambassador to Great Britain, has made another gift of \$60,000 to the Red Cross Hospital at

San Mater, Cal. The gift is a memorial to her father and mother, Mr. and Mrs. Mills.

The Wothersgillian gold medal given triennially by the Medical Society of London has been awarded to Dr. F. W. Mott for his researches on the nervous system, especially the influence of syphilis on it.

In Germany there are 800,000 persons affected with tuberculosis in some form. Of these at least 100,000 die annually. Estimating each life as worth on an average \$1,500, and this is under the real value, the loss would be \$150,000,000 a year.

Emperor William of Germany, in an address to the naval cadets, said some very plain words about alcohol. He claimed that of all the crimes that came before his attention nine-tenths of them were caused by drink. He said that the nations that used the smallest amount of alcohol were the nations that would win.

In the State of Washington an amendment has recently been proposed to the criminal code to the effect that a woman may give evidence in an abortion case without incriminating herself. This may open the way to serious blackmail actions. Such legislation may do the medical profession very grave harm.

Lady Talbot, wife of the late Governor of Victoria, Australia, after careful consultation with medical men, has established a milk institute in Melbourne as a public charity. Her hope is to reduce the infant mortality. Some government aid was sought, but a special committee reported against any public grant to the institute.

In Australia it has been observed that Brisbane and Sydney are frequently visited by the plague, while Melbourne and Adelaide have almost entirely escaped. This has been shown to be due to the fact that the grey rat does not spread the disease, while the black rat and the fleas on it do spread the plague.

The *Boston Medical and Surgical Journal* reports the case of a woman who was born in 1864. Her eldest daughter was born in 1878. This one's daughter was born in 1895, and this one, again, had a daughter in 1910. Thus the first woman was a great-grandmother at the age of 45.

Dr. L. W. Sambon, of the School of Tropical Medicine, has issued a statement that the black rat is the main agent in spreading the plague. He also states that cats, dogs, ferrets, bats, squirrels, pigs, hares, rabbits, cattle, sheep, and poultry suffer from the disease. This wide distribution renders it very difficult to stamp the disease.

The United States National Association for the Prevention of Tuberculosis has issued a request that the churches devote some attention to the prevention of the disease about the end of April. The asso-

ciation also intends posting up 20,000 large posters giving the public useful information.

All will regret to hear of the death of A. O. J. Kelly, of the University of Pennsylvania, a couple of weeks ago, at the age of 41. He was joint editor with John H. Musser of a new system of treatment, in three volumes. For a number of years he was editor of the *American Journal of Medical Science*.

Dr. Harvey R. Gaylord, of Buffalo, the noted investigator on cancer, claims to have discovered a serum that will cure cancer. Senator Loomis has introduced a bill into the New York State Legislature appropriating \$65,000 for a hospital in Buffalo, near the laboratory, for the purpose of carrying on the treatment.

Sir Guy F. Wilson, at a meeting of the Viceroy's Council a short time ago, said he was unwilling that the income to the people of India be curtailed by any interference at present with the opium trade. He thought the time would come when India would be called upon to make sacrifices for the uplifting of other nations.

From day to day comes word of the ravages of the plague in some parts of China and in Manchuria. Doctors attend daily hundreds of patients under the most trying of circumstances. The death rate is appalling, and already some doctors have fallen in their heroic fight against the disease.

An interesting case was tried at Harlem, N.S., recently. A doctor sued a patient for a bill of \$14 for the removal of 14 pounds of fat. It appears that there had been a return of some of the fat. Justice Davies allowed \$12 and deducted \$2 as a rebate for the return. This was at the rate of \$1 per pound.

Dr. Raymond W. Brown, house physician of Hudson Street Hospital, New York, died of spinal meningitis within twenty-four hours of the first appearance of the symptoms of the disease. This is the second death in a couple of days of a physician who is believed to have contracted the disease from contact with infected Greek immigrants.

Lodges have become so numerous and strong in France that they have been able to bargain with medical men for attendance on the members of these societies on such terms that the doctor will not receive more than 10 and 12 cents for a visit. One doctor took a lodge for a certain sum. He found at the end of the year he had made 4,000 visits for \$480, or 12 cents a visit. The Government has passed an act to relieve the profession to some extent.

Towards the end of February there was a severe epidemic of diphtheria in the Johns Hopkins Hospital. There were at one time 68 cases of the disease among the patients, students, and nurses. The most rigid system of isolation possible was instituted. The authorities were

at a loss to know how the disease gained such access to the hospital and why it spread so rapidly. There were many instances of the disease in a portion of Baltimore from which the hospital draws a considerable number of its patients. This may explain the outbreak.

West Australia has had for some time a very stringent medical act. A new clause has been introduced into the Health Bill to the effect that any false statement regarding the composition of any proprietary medicine, or its curative powers or effects, shall be guilty of committing an offence. In the act newspapers are held liable if they publish any advertisement regarding medicines containing untruthful statements. The penalty is \$250 for the first offence and six months' imprisonment for the second. There is a determination to drive all such fraudulent preparations off the market.

BOOK REVIEWS.

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 (3rd) edition, thoroughly revised. Octavo, 983 pages, with 506 engravings, mostly original, and 22 plates. Cloth, \$5.50 net. Lea & Febiger, Philadelphia and New York, 1911.

This work has already attained a remarkable record of popularity. Three editions have been called for in less than three years, and during part of this time it has been entirely out of print, owing to the unexpected rapidity of exhaustion. Sustained success is built on merit. Professor Ballenger started his book with adequate preparation. Regardless of labor, he added to his library some 3,000 monographs, pamphlets, and reprints, by corresponding with colleagues in America and Europe. In this way he obtained the very latest literature, embracing the most advanced knowledge throughout the civilized world. With equal disregard of labor, he caused to be made, under his direct supervision, a series of drawings of such profusion that even the steps of operations were illustrated, so that his readers might master the technique at leisure. Moreover, he made his work completely comprehensive by covering both the medical and surgical treatment of the whole region of the nose, throat, and ear. It is, in a word, a combined treatise and atlas. A book of such breadth, cosmopolitanism, and high authority served equally for the instruction of students, the guidance of practitioners, and for specialists to post up to date. Hence the concentration of demand, which has given Dr. Ballenger frequent opportunities to revise the work and to keep it in the forefront of all the rich literature of its

subjects. He has again improved such an opportunity to the full, and his readers will find in this new edition all recent advances of value and many new and characteristic illustrations.

The work consists of four main sections, namely, of the nose, the pharynx, the larynx, and the ear. We have reviewed the former editions of this work and note with pleasure the success with which the author keeps everything up to date. It is a text-book for the specialist and a work of reference for the general practitioner.

A MANUAL OF CYSTOSCOPY.

By J. Bentley Squier, M.D., Professor of G-U Surgery, New York Post-Graduate Medical School and Hospital; Surgeon to Work House Hospital and Home for Aged and Infirm, Department of Charities and Corrections, New York; Consulting Surgeon, New York Neurological Hospital; Fellow American Association of G-U Surgeons; Fellow New York Academy of Medicine; and Henry G. Bugbee, M.D., Instructor in G-U Surgery, New York Post-Graduate Medical School and Hospital; formerly Surgeon in Chief, Vassar Brothers Hospital, Poughkeepsie; Fellow New York Academy of Medicine. With twenty-six original plates, eighteen of which are colored. Octavo, flexible leather, \$3.00 net (Sent prepaid on receipt of price). Paul B. Hoeber, Medical Publisher, Bookseller and Importer, 69 East 59th Street, New York, 1911.

This is a usefully-arranged little book, and gives excellent advice and instructions on the methods of carrying out the routine examination of the bladder. The illustrations are very fine. They set forth the instruments to be employed and the appearances to be seen by their aid. The book will be found of the utmost value to those who have to do any work along this line. The book is got up in a very attractive style. The paper and type are all that could be desired, and the binding is very dainty.

PROGRESSIVE MEDICINE, VOL. I., MARCH, 1911.

A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 365 pages, with 18 engravings. Per annum, in four paper-bound volumes, containing over 1,200 pages, \$6.00 net; in cloth, \$9.00 net. Lea & Febiger, Publishers, Philadelphia and New York.

This quarterly volume maintains the reputation of the series to which it belongs. We can recommend "Progressive Medicine" as one of the very best means of keeping up with the times. The type, paper, and illustrations are excellent. The publishers deserve credit for their efforts to make this a really valuable work.

A MANUAL OF PHYSICAL DIAGNOSIS.

By Brefney Rolph O'Reilly, M.D., C.M., F.T.M.C., Toronto; M.R.C.S., Eng., L.R.C.P., Lond., Demonstrator in Clinical Medicine and in Pathology, University of Toronto; Assistant Physician to St. Michael's Hospital, Toronto; Physician to Toronto Hospital for Incurables. With 6 plates and 49 other illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street, 1911.

The author of this book comes of medical stock on both sides; and Philip Gilbert Hammerton tells that in certain kinds of learning there is something that is hereditary about it. As one reads this book the appreciation of it steadily grows.

In the matter of physical diagnosis the old words, "Ye have eyes and ye see not, and ye have ears and ye hear not," are often too true. We think that the subject of diagnosis is one of the most important in the curriculum, and one that is by far too often poorly taught, and to which an insufficient portion of the student's time is devoted.

The contents at the beginning give a very complete scheme of what may be expected in each chapter. This part of the book would bear very careful study, and would prove of more than usual value to the student if practically memorized.

The author has paid much attention throughout to that aspect of physical diagnosis known as "inspection." We think this is quite opportune. An experienced clinician and diagnostician will rapidly form opinions as to the ailments of patients as he walks down a ward. This comes from a proper training of how to see and what meaning should be attached to what is seen. What a difference there is in the facial expression of paralysis agitans and exophthalmos!

Palpation, percussion, and auscultation are dealt with in the same thorough manner. It is not enough, however, to emphasize the importance of these. The methods of conducting them must be well brought out. Under each one of these headings the most complete details are given, and yet in such a precise manner that the entire book is a small one of less than four hundred pages.

Somewhat of the great difficulty that has long hung over certain aspects of diagnosis, such as the nervous system and the cranial nerves, is largely removed by the clear and terse treatment they receive at the hands of the author. To those who know these methods it is a great pleasure to meet with them so well stated; but to those who are not familiar with the best methods of diagnosis of the more intricate topics it will be a double pleasure to find how so many of the difficulties vanish.

We understand that this book has been adopted as a text by the University of Toronto, the Western Medical College of London, the Medical College in Kingston, and the College of Physicians and Sur-

geons of Ontario. This is a good beginning. That the book will have a large sale there can be no doubt. The time will soon come when the student will find that he must have a copy of the book.

The publishers have done their part well. We congratulate them and the author on the outcome of their efforts. The book is truly a *multum in parvo*, and should become for every student a *vademecum*.

ST. MARY'S HOSPITAL, MAYO CLINIC, 1905-1909.

Collected Papers by the Staff of St. Mary's Hospital, Mayo Clinic, Rochester, Minnesota, 1905-1909. Octavo of 663 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1911. Cloth, \$5.50 net. The J. F. Hartz Co., Limited, Toronto, Canadian Agents.

This is a volume of reprints. There has been prepared for it a complete index, which adds much to its value for the purpose of reference. The authors do not claim for the volume that it is a systematic treatise on surgery. It is stated that the primary object in collecting these papers was for the use and convenience of the members of the staff of St. Mary's Hospital, Rochester. The papers are written by Drs. H. G. Andrews, E. H. Beckman, W. F. Broasch, H. Z. Giffin, C. Graham, J. Guthrie, M. S. Henderson, E. S. Judd, W. J. Mayo, C. H. Mayo, W. C. MacCarthy, H. S. Plummer, L. B. Wilson, and Alice Magaw. The book is edited by Mrs. M. H. Mellish. There are papers on the alimentary canal, hernia, genito-urinary organs, ductless glands, head and extremities, anæsthetics, technic, and general papers. The quality of these papers is good. One of the points emphasized in these papers is the importance of early diagnosis. Further, it is contended that early operation cures a large percentage of malignant diseases. Then, again, it is claimed that gastric ulcer is the cause of a large percentage of cancer cases. These papers can be recommended as readable and instructive, and contain much information.

PRACTICAL TREATMENT—VOLUME I.

A Handbook of Practical Treatment. In three volumes. By 79 eminent specialists. Edited by John H. Mussor, M.D., Professor of Clinical Medicine, University of Pennsylvania; and A. O. J. Kelly, M.D., Assistant Professor of Medicine, University of Pennsylvania. Volume I, octavo of 909 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1911. Per volume, cloth, \$6.00 net; half morocco, \$7.50 net. The J. F. Hartz Co., Limited, Toronto, Canadian Agents.

This large and handsome volume is the first of a system of three volumes on practical treatment. The work is dedicated to one of the

best-known therapists and teachers of medicine in America, namely, Dr. Horatio C. Wood. This fact alone would lay a heavy obligation upon the contributors to produce a work of the highest possible merit. The editors—Drs. J. H. Musser and A. O. J. Kelly—were pupils of Dr. Wood, and carry into this work in this system the same ambition for high-class work that ever governed the great teacher to whom these volumes are dedicated. The present volume contains articles by Drs. A. C. Abbott, J. C. Bloodgood, G. Blumer, Sir L. Brimton, C. W. Burr, R. C. Cabot, W. Coleman, G. Dock, D. L. Edsall, M. H. Fussell, C. H. Harrington, L. Hecktoen, G. Hinsdale, M. Ladd, R. T. McKenzie, J. M. Mosher, G. P. Müller, J. H. Musser, H. K. Pancoast, H. Sewall, J. Tyson, and H. C. Wood, jr. The subjects covered are varied and important, namely, Principles of Therapeutics, Preventive Treatment, Principles of Dietetics, Dietetics in Infancy, Drug Treatment, Serum Therapy, Organotherapy, Rest Cure, Exercise Treatment, Psychotherapy, Hydrotherapy, Chinalotherapy, Artificial Aerotherapy, Electrotherapy, Radiotherapy, Miscellaneous Measures, General Care of the Sick, Food Intoxications, Drug Intoxications, Sunstroke, Diseases of the Blood, Diseases of the Lymphatic System, Diseases of the Ductless Glands, and Surgical Treatment of the Thyroid and Parathyroid Glands. This is an excellent collection of articles, and, if the matter is equal to the texts, the volume would be one of the utmost value. We have examined these articles with care, and can confidently state that they are well written and thoroughly up to date in every respect. This volume sets a high level for the others to follow. The completed system will be looked forward to with keen interest.

DIFFERENTIAL DIAGNOSIS.

Differential Diagnosis. Presented through an analysis of 383 cases. By Richard C. Cabot, M.D., Assistant Professor of Clinical Medicine, Harvard Medical School. Octavo of 753 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1911. Cloth, \$5.50 net. The J. F. Hartz Co., Limited, Toronto, Canadian Agents.

In this very handsome volume of 753 pages we have recorded a careful record of 383 cases for the special purpose of arriving at a correct diagnosis. These cases are grouped under their proper divisions, such as pain in the head, cornea, cough, etc. The author has taken much pains to reduce his remarks to as condensed a form as possible. The case is stated, then follows a discussion of the case, the outcome is stated, and the diagnosis given. We regard this as a most original and useful sort of book.

URINE EXAMINATIONS.

Urine Examinations Made Easy. A plan of examinations with the common tests fully described. By Thomas Carruthers, M.A., M.B., Ch.B. Second edition. London: J. & A. Churchill, 7 Great Marlborough Street, 1911. Price, 1/6 net.

This is a very handy and reliable guide to the testing of urine. It should be on the desk of every busy practitioner, as it enables him to refresh his memory at a glance as to how to use his tests, and which ones to use. As a working guide there could be none better.

THE JOHNS HOPKINS HOSPITAL REPORTS.

This is volume XVI. of these reports. Most medical men are familiar with them. This volume deals with the experimental production of tuberculosis of the genito-urinary organs, by Dr. George Walker; the effects on breeding of the removal of the prostate and vesiculæ seminales, by Dr. George Walker; scalp accidents by Dr. John S. Davis; obstruction of the inferior vena cava, by Dr. J. H. Pleasants; and studies on cardiac tonicity in mammals, by Dr. J. D. Cameron. All the findings in these investigations may be accepted as giving us the best there is available at the present date. This sort of original work is doing much for medical science.

OBITUARY.

CHARLES M. STEWART, M.D.

Dr. Stewart, of 142 Carlton Street, Toronto, was instantly killed on the afternoon of 25th March. He and some friends were out on horseback. His horse took fright and shied in towards the car, and was struck by it. This threw Dr. Stewart on the track, and his body was passed over by the front wheels. He was in his thirty-eighth year and unmarried. He graduated from the University of Toronto in 1897. He was house surgeon at Toronto General Hospital in 1898-9. He then spent three years abroad in study. For a time he was superintendent of the hospital in Ottawa. Later he located in Toronto, and followed ear, nose, and throat work.

J. W. BURNS, M.D.

Dr. J. Wesley Burns died at his home in Caledonia, Ont., recently. He was in his fifty-eighth year. He was a graduate of Trinity University of the class 1876.

WILLIAM ANDERSON, M.D.

Dr. Anderson died at Newcastle, Ont., in his seventy-fourth year. He was a graduate of Victoria University of 1858.

RODERICK KENNEDY, M.D.

Dr. Roderick Kennedy, a resident of Bath, Ont., passed away at the General Hospital, Kingston. He was 88 years of age. The remains were taken to Bath. Dr. Kennedy was one of the early students of Queen's, graduating in 1863. He had lived a retired life for some years.

W. I. BRADLEY, B.A., M.D., C.M.

The death occurred at Ottawa on 22rd March of Dr. W. I. Bradley, one of the best known of the medical practitioners of that city. Dr. Bradley fell into ill-health last fall, and went to Montreal for treatment. He graduated from Toronto University in arts in 1884, and in medicine from McGill in 1888, with honors and a gold medal in chemistry. He leaves a widow and two children.

I. H. ARMITAGE, M.D.

Dr. Armitage, of Waterloo, Ont., died on 18th January. He was a graduate of McGill, and was in his fifty-first year. His death was due to an injury to the spine. He leaves a widow and two children.

ROBERT P. MCKENZIE, M.D.

Dr. R. P. McKenzie died at Rossland. He was only in his thirty-sixth year. He graduated from McGill in 1904. He was born at Thurlow, Ont.

GIDEON BARNABY, M.D.

Dr. Barnaby was born in Cornwallis in 1871, and graduated from Harvard. He practised for some time in Lunenburg County and at Ridgetown, N.S. In 1907 he retired to his farm at Grenville. He leaves a widow and daughter.

EDMOND ROBILLARD, M.D.

Dr. Robillard was one of Montreal's oldest physicians, having been born in 1825. He received his medical education at the Victoria School of Medicine. He was twice married.

MISCELLANEOUS MEDICAL NEWS.

MICRO-ORGANISM FOUND IN THE BLOOD OF ACUTE CASES OF POLIOMYELITIS.

The Department of Health for Pennsylvania has issued, under the names of Drs. Dixon, Fox, and Rucker, the following statement:

In examining the blood from acute cases of poliomyelitis in the human beings, and also in monkeys in which the disease was produced experimentally, an organism was found different in morphologic characteristics from any heretofore described, which may or may not, on further investigation, prove to be the etiological factor in the causation of the disease. Blood smears being fixed in methyl alcohol for one minute and stained with carbol-thionin, the organism appears as a faintly stained blue rod with regular cell wall about 10 microns long and about .8 microns in width, curved at an angle of 60 to 75 degrees at one end, occasionally at both ends. At times the curved end is bulbous. Some of the organisms appear to have a very finely granular protoplasm when the highest amplification is employed. They may be discerned by means of a 4 m.m. dry objective, but their characteristics are much more satisfactorily delineated under the 1-12 oil immersion lens. They are found free in the serum as well as within the body of the red blood cell.

The organisms do not retain the violet color when stained by the method of Gram, but assume the color of the counter-stain, which, as generally used in this laboratory, is a very dilute solution of carbol fuchsin.

The bloods examined were from ten different cases of acute poliomyelitis in children, and were taken during the epidemic of last summer and autumn, and from thirteen cases of the disease during the acute stage, which had been produced experimentally in as many monkeys.

Blood smears from three normal human beings were carefully examined, and, although the search for these organisms was diligently made, none were found. Smears were made from the bloods of thirteen normal monkeys, with negative results. After inoculation with the virus, these same monkeys gave positive results. The blood of other normal monkeys gave negative results.

Blood smears were stained with iodine and sulphuric acid in order to test the organisms for cellulose, but no blue-stained organisms were seen.

Smears from the cords and brains of paralyzed monkeys and from one human case were examined, but none of the new organisms were found.

Filtered virus stained with carbol-thionin and by Gram's method showed none of these organisms.

Defibrinated blood, three weeks to two months old, from two paralyzed monkeys, showed the forms in increased numbers.

Cultures made from the blood of a paralyzed monkey, in blood bouillon, plain bouillon, and blood agar, examined after having been inoculated three weeks, showed the presence of the organism in increased numbers. Dorsett's egg medium was inoculated with the same blood at the same time, but the organism was not found in smears from the surface of the medium or from the water of condensation.

We have searched, without success, for moving organisms in fresh blood, in old tubes of defibrinated blood from paralyzed monkeys, in blood bouillon, plain bouillon, serum bouillon cultures three weeks old, and in the condensation water in three weeks old cultures on Dorsett's egg medium under dark field illumination.

Success in isolating the organisms has not attended our efforts as yet.

SAMUEL G. DIXON, M.D.

HERBERT FOX, M.D.

JAMES B. RUCKER, M.D.

THE VALUE OF HUMAN LIFE.

The anti-vivisectionists and the anti-vaccinationists, always with us and always crying out for mercy to the poor, dumb animals who are

sacrificed to the cruel, brutalized instincts of the medical profession, have been given substantial food for thought recently in two widely separated directions.

In England, Lord Cromer, and there is no more judicious or careful authority, has made public some illuminating statistics. In an Indian district, with a population of 827,000 four months prior to the appearance of bubonic plague, 187,000 people were inoculated against the disease, leaving 640,000 unprotected. When the plague came 314 deaths occurred among those inoculated. Among the unprotected there were 29,723 deaths. Reduced to understandable figures, only one person in every 595 of those protected died; of the others who did not avail themselves of the advance in scientific prevention one in every 22 died.

The other instance comes from Dr. W. C. Gorgas, of the United States army, in charge of the canal zone, who states that since 1905 there have been no cases of yellow fever or bubonic plague on the isthmus, and that malaria among the canal employees has been reduced from 821 per thousand to 215.

In spite of these patent facts the faddists and purblind objectors to the protection of humanity continue to careen through otherwise sensible and interesting journals and magazines, and give forth page on page of literary hysteria to the crusade for the protection of the "poor, dumb brute" against the brutalizing influences of medical research.

It were useless waste of space to call attention to the malicious fabrications of some of the descriptions of horrible scenes which these over-enthusiastic laborers in self-chosen charities claim to have seen; they are too well known; but it was a clever damper to the enthusiasm of these somewhat human crusaders which an insistent layman spread over their exuberant, if misguided, efforts when he asked: "At how many rabbits or guinea pigs do you value your wife or your husband or your child?"—*Buffalo Medical Journal*.

MEDICAL OFFICERS OF THE MILITIA.

The following officers were elected, 24th February, by the Association of Medical Officers of the Militia of Canada, which held its annual meeting in Ottawa: Honorary president, Sir Frederick Borden, Minister of Militia; honorary vice-presidents, Col. E. F. Fiset, D.S.O., Deputy Minister of Militia, and Col. G. C. Jones, D.G.M.S.; president, Major E. A. Label, Quebec; vice-presidents (one for each military district), Major D. B. Bentley, Lieut.-Col. Fotheringham, Major A. R. B. Williamson, Major J. W. Shillington, Major E. R. Brown (5th R.H.), Lieut.-Col. R. T. Macdonald, Captain W. L. M. Carter (8th R.R.), Major T. D.

Walker, Major J. Ross, Major W. Webster, Major F. C. McTavish, Major D. McLauchlan, Captain L. S. MacKidd; secretary, Captain T. H. Leggett, Ottawa; assistant secretary, Lieut. N. MacLeod, Ottawa; treasurer, Captain McKelvey Bell, Ottawa.

The executive committee is composed of one officer from each military district. They are: Lieut.-Col. R. I. Lockhart, Lieut.-Col. F. Fenton, Major F. Etherington, Major C. A. Hodgetts, Major C. F. Wylde, Major M. Lauterman (6th Hussars), Major G. G. Turcot, Captain T. E. Bishop, Lieut.-Col. J. A. Sponagle, Major W. L. Watt, Captain A. M. Robertson (6th Regiment Artillery), Lieut.-Col. S. R. Jenkins (4th Regiment Artillery), Captain J. A. Hislop (19th Alberta Mounted Rifles).

The annual dinner of the association was held at the Ottawa Golf Club. The president, Lieut.-Col. C. S. Rennie, of Hamilton, was toastmaster, and about seventy-five were present. At noon Lieut.-Col. Rennie entertained the members to a luncheon, and in the evening the officers were entertained by Sir Frederick and Lady Borden to a dinner in honor of Major Seaman of the United States Volunteers, who was present.

MORTALITY AMONG MEDICAL MEN.

The Journal of the American Medical Association, according to its custom, publishes a note on the deaths of medical men in the United States and Canada during the year recently concluded. The mortality rate cannot be regarded as excessive, being calculated at 16.96 per 1,000, though the average for the last nine years was only 16.21 per 1,000. The age of death varied from 22 to 97, the average being 59 years 11 months and 4 days. The number of years of practice varied from 1 to 72, the average being about 32½. The chief causes of death, in the order named, were "heart disease," cerebral hæmorrhage, pneumonia, violence, and nephritis. The appearance of violence so high in the list will surprise readers in this country. The deaths by violence, 172 in number, include 48 suicides—nearly one a week. Curiously enough, considering their professional knowledge of toxicology, the victims chose firearms more frequently than poison as a mode of suicide. As illustrative of longevity in the profession, it is interesting to note that no less than 30 medical men died at ages above 91, and 214 between 81 and 90. The greatest mortality was at the age of 65. Our contemporary quotes the names of some of the most notable decedents. After that of William James, the psychologist and philosopher, probably the best-known names are those of James Nevins Hyde, dermatologist, of Chi-

cago; John Veitch Shoemaker, and C. A. Herter, chemical pathologist, of New York.—*The Medical Press*.

THE CANADIAN ASSOCIATION FOR THE PREVENTION OF TUBERCULOSIS.

The Canadian Association for the Prevention of Tuberculosis will hold its eleventh annual meeting on Thursday and Friday, the 18th and 19th of May, in London, Ont. As the sanatorium movement in Ontario has received much encouragement from the increased grants of the Provincial Government for such institutions, it is hoped that the splendid new sanatorium at London will prove of special interest to the delegates. Papers and discussions by prominent men on the practical side of the tuberculosis question will be the leading feature of the meetings, and it is hoped that a large number will attend. It is especially hoped to interest the various municipalities which are contemplating active work in this movement by the opportunity these meetings will afford of visiting the Queen Alexandra Sanatorium at London.

MILK BILL.

An Act Respecting the Production and Sale of Milk for Human Consumption.

His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

1. This Act may be cited as *The Ontario Milk Act*.
2. In this Act "municipality" shall not include a county.
3. The council of every municipality is hereby authorized to pass by-laws for regulating milk produced for sale, offered for sale, or sold within such municipality as to
 - (a) The care of cows producing milk for sale for domestic consumption;
 - (b) The cleanliness, ventilation, and sanitary conditions of the places in which cows are kept or milked or in which milk is stored;
 - (c) The water supplied to cows;
 - (d) The care and cleansing, construction, and type of all utensils used in handling milk, whether by producers, carriers, or vendors;

- (e) The care, storage, transportation, and distribution of milk by producers, carriers, or vendors;
 - (f) The making of bacteriological tests for the purpose of ascertaining the wholesomeness of milk offered for sale by any producer, carrier, or vendor; and
 - (g) Such other matters regarding the production, care, transportation, or sale of milk as the council may consider necessary;
- and upon such regulations being approved in writing by the Minister of Agriculture, the same shall apply to all milk produced for sale, offered for sale, or sold within such municipality.

4.—(1) The council of every municipality is hereby authorized to enact by-laws regulating the granting of licenses to vendors of milk for human consumption in that municipality, and shall have power to refuse or cancel such licenses.

(2) No person shall sell milk in any municipality where such by-laws are in force without first obtaining a license therefor.

5.—(1) The council of every municipality is hereby authorized to enact by-laws fixing the standard for butter fat and total solids of milk sold in such municipality, but no milk shall be sold for human consumption which contains less than 12 per cent. of solids, of which 3 per cent. shall be butter fat.

(2) No person shall place any preservative in milk intended for human consumption, or sell or offer for sale to any vendor milk from which any part of the butter fat has been removed, or to which water has been added, or which has otherwise been changed from its normal condition, without previously giving notice in writing of such change to such vendor; and no vendor of milk shall sell or offer for sale milk not complying with the standard, or from which butter fat has been removed, or to which water has been added, or which has received special treatment causing it to differ from normal milk, without clearly and distinctly advertising the same in the manner demanded by the regulations of the municipality in which it is sold.

6.—(1) The council of every municipality is authorized to appoint an inspector or inspectors for the enforcement of this Act and any regulations enacted hereunder, and each such inspector shall have power to prohibit the sale of milk for consumption within the municipality for which he is inspector, which in his judgment is produced or handled contrary to the provisions of this Act or any regulations made hereunder.

(2) Every such inspector shall have the right to inspect the premises of every vendor licensed to sell milk within the municipality for which he is inspector, to see that the requirements of this Act and

the regulations enacted hereunder are fully complied with, and to take samples of milk for examination and testing.

(3) Every such inspector shall have the right of entrance to the premises, no matter where located, of every person producing milk for sale or consumption within the municipality for which he is inspector, of fully inspecting the same, and of taking for examination and having tested samples of milk produced therein and of the water supplied to cows or used in cleansing dairy utensils.

(4) Every such inspector shall have the right to inspect and to take samples of milk for sale or consumption within the municipality for which he is inspector while in transit, and shall have the right of entrance to any premises in order to procure samples of such milk.

(5) The result of all said tests shall be open to public inspection at all reasonable times, and may be published by the medical health officer of the municipality if he so desires.

7. No milk shall be sold from any cow which, upon physical examination by a duly qualified veterinary surgeon, shall be declared to be suffering from tuberculosis of the udder or milk glands, or whose milk, upon bacteriological or microscopic analysis, is shown to contain tubercle bacilli, or which is known to be suffering from splenic fever or anthrax, or any other general or local disease which is liable to render milk from such cow a menace to the public health. Where any doubt arises as to any cow being affected with any of the diseases above mentioned, it shall be the duty of the inspector to notify the owner that the milk of such cow must not be sold or offered for sale until a permit so to do has been granted by the board of health of the municipality in which such milk is being consumed; and, upon such notice being given, no milk from such cow shall be sold until said permit has been granted.

8. No person suffering from or who has knowingly within a time prescribed by the regulations of the Provincial Board of Health been exposed to diphtheria, scarlet fever, typhoid fever, erysipelas, smallpox, anthrax, or venereal disease, or any infectious skin disease, shall work or assist in the production, transportation, or vending of milk, and no proprietor, manager, or superintendent of any dairy or dairy farm shall knowingly permit any person suffering or exposed as aforesaid, to work or assist in the production, transportation, or vending of milk, and the sale of milk produced or handled under such circumstances may be forthwith prohibited by the inspector.

9. No cans, bottles, or other utensils used in the distribution of milk shall be used for any other purpose whatsoever, and all such cans, bottles, and other utensils must be thoroughly cleansed before again being used.

10. The council of every municipality is authorized to establish and maintain or assist by annual grant or otherwise in the establishment and maintenance of milk depots, in order to furnish a special supply of milk to infants.

11. It shall be unlawful to apply the term "certified" to any milk which does not comply with the following standard:

- (a) It shall be taken from cows semi-annually subjected to the tuberculin test and found without reaction;
- (b) It shall contain not more than 10,000 bacteria per cubic centimetre from June to September, both inclusive, and not more than 5,000 bacteria per cubic centimetre from October to May, both inclusive;
- (c) It shall be free from blood, pus, or disease-producing organisms;
- (d) It shall be free from disagreeable odor or taste;
- (e) It shall have undergone no pasteurization or sterilization, and be free from chemical preservatives;
- (f) It shall be cooled to 45 degrees Fahrenheit or under within half an hour after milking, and kept at that temperature until delivered to the consumer;
- (g) It shall contain 12 to 13 per cent. of milk solids, of which at least $3\frac{1}{2}$ per cent. is butter fat.
- (h) It shall be from a farm the herd of which is inspected monthly by the veterinarian, and the employees of which are examined monthly by a physician;

Provided that no milk shall be sold as "certified" until a certificate setting forth that the above conditions have been complied with is obtained from time to time from the medical health officer of the municipality in which it is to be consumed or from an incorporated society of medical practitioners.

12. It shall not be lawful to apply the word "pasteurized" to any milk unless all portions have been subjected for at least twenty and not more than thirty minutes to a temperature of not less than 140 and not more than 150 degrees Fahrenheit, and then at once cooled to 45 degrees Fahrenheit or under, and kept at that temperature until delivered to the consumer, and the process of pasteurization shall be subject to inspection by the local medical health officer or such inspector as he may designate; provided always that all such milk shall in all other respects be subject to all the terms and conditions of this Act. This section shall not come into force until July 1, 1911.

13.—(1) Any person violating any of the provisions of this Act or of any by-law or regulation passed hereunder shall incur a penalty of not less than \$1 nor more than \$50.

(2) The Ontario Summary Convictions Act shall apply to every prosecution under this Act.

14.—(1) Paragraphs 1, 2, and 2a of section 550 of the Consolidated Municipal Act, 1903, as amended by section 23 of the Municipal Amendment Act, 1905, are amended by striking out the word "milk" where it occurs in the said paragraphs.

(2) Paragraph 23, as enacted by section 22 of the Municipal Amendment Act, 1910, and paragraph 24 of section 583 of the Consolidated Municipal Act, 1903, are repealed.

(3) Sections 108 and 109 of the Public Health Act are amended by striking out the words "or milk" where they occur in the said sections and inserting the word "or" before the word immediately preceding the words so struck out.

(4) The clause numbered 10 of the form of by-law in Schedule B of the Public Health Act is repealed, and the said clause shall not apply to any municipality.

(5) Section 4 of the Act Respecting the Slaughtering of Cattle and the Inspection of Meat and Milk Supplies of Cities and Towns is repealed.

15. Notwithstanding anything contained in the Milk, Cheese, and Butter Act, being chapter 53 of the Acts passed in the eighth year of the reign of His late Majesty King Edward VII., nothing in the said Act shall apply to milk produced, offered for sale, or sold, for human consumption; and the provisions of the said Act, so far as they relate to such milk, but to that extent only, are repealed and the said Act shall apply exclusively to milk and cream to be used in the manufacture of cheese and butter.

16. Except as hereinbefore provided, this Act shall come into force on the first day of June, 1911.

AN ACT RESPECTING THE TORONTO GENERAL HOSPITAL.

At the session of the Ontario Legislature just closed an Act was passed containing some important regulations regarding the Toronto General Hospital.

One of these provisions confirms the agreement made between governors of the university and the trustees of the hospital. The bill also sets forth and validates the by-law of the City of Toronto for the additional grant of \$250,000. These are lengthy, and are not published here, as they contain but little that is of interest to the medical profession. The by-law of the Toronto General Hospital, which is incorporated in the Act and becomes law, is quite interesting and is here given in full.

BY-LAW RESPECTING THE MEDICAL STAFF OF THE HOSPITAL.

Be it enacted by the trustees of the Toronto General Hospital:

1. In making appointments to the visiting staff, regard shall be had to the agreement between the governors of the University of Toronto and the trustees, dated the first day of December, 1910, to the previous training and record of the applicant, his capacity to render service to the sick in the hospital, his scientific attainments, his teaching capacity, and the promise he gives for future work.

2. All appointments shall be made annually at the regular meeting of the board, in the month of April.

3. There shall be no remuneration to members of the visiting staff.

4. In making appointments to the staff sex shall be no bar.

5. The members of the visiting staff shall not be allowed to serve on the staff of any other general hospital.

6. The following shall be the services in the several departments of the hospital:

In medicine (including dermatology and neurology) three co-ordinate services;

In surgery, four co-ordinate services.

In obstetrics, one service.

In gynæcology, one service.

In ophthalmology, one service.

In otology, rhinology, and laryngology, one service.

7. Each of the services in the several departments shall be under a head, with such associates and assistants as may be found necessary.

8. The several services in all departments shall be so organized as to include both indoor and outdoor patients and the heads of such services shall be responsible for the treatment of all such patients.

9. The heads in surgery shall retire from their position at the age of 55, and heads in medicine at the age of 60 years. If the board of trustees and the university so agree, the age limit may be extended to 60 years in the case of surgeons and to 65 years in the case of physicians. If the board and the university fail to agree to any such extension, either party may refer the matter to the Lieutenant-Governor in Council for decision. The age limit for surgeons shall apply to the heads in the departments of obstetrics, gynæcology, ophthalmology, otology, rhinology, and laryngology.

10. The heads in medicine shall not engage in general practice, but shall confine their work outside of the hospital to consultation.

11. The heads in surgery shall practise surgery only; but this provision shall not apply to the present head professor of surgery in the faculty of medicine of the University of Toronto.

12. The head of the service in obstetrics shall practise obstetrics and pediatrics only.

13. The head of the service in gynæcology shall confine his work in the hospital to gynæcology only, but may outside engage in surgery, but not in general practice.

14. The head of the service in ophthalmology shall confine his work in the hospital to ophthalmology, but may outside practise the three other specialties of otology, rhinology, and laryngology.

15. The head of the service in otology, rhinology, and laryngology shall confine his work in the hospital to the specialties, but may outside practice ophthalmology.

16. There shall be a department of pathology and bacteriology and a department of pathological chemistry. These two departments shall be in charge of professors of the university.

17. The department of anæsthetics shall be under the supervision of one head.

18. All public ward patients shall be entered under the care of heads of services, and shall be available for the clinical instruction of students of the medical faculty of the University of Toronto.

19. Members of the medical profession who are not on the staff of the hospital shall have the privilege of attending patients in the private, semi-private, and semi-public wards.

20. There shall be a medical board, the work of which shall be advisory only, which shall consist of the heads of the various services.

21. Seniors who, by reason of the age limit, are required to sever their connection with the active staff, may be given positions on the consulting staff.

Passed the twenty-fifth day of January, 1911.

(Signed) J. W. FLAVELLE,
Chairman.
(L.S.)

(Signed) A. F. MILLER,
Secretary.

AN ACT TO AMEND THE CANADA MEDICAL ACT..

(Reprinted as amended and reported by the Select Committee to which it was referred.)

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

1. Paragraphs (c) and (d) of section 2 of The Canada Medical Act, chapter 137 of the Revised Statutes, 1906, are repealed and the following are substituted therefor:

“(c) ‘University’ shall mean any university which has a teaching medical department in connection therewith, and has the power to grant medical degrees;

“(d) ‘Medical school’ includes any institution recognized by a provincial medical council wherein medicine is taught.”

2. Paragraphs (c) and (e) of section 5 of the said Act are repealed and the following is enacted as paragraph (c) of the said section:

“(c) The determination and fixing of the qualification and conditions necessary for registration, the examinations to be undergone with respect to professional subjects only, and generally the requisites for registration: Provided that the council shall not determine or fix any qualifications or conditions to be complied with as preliminary to or necessary for matriculation in the study of medicine and for the obtaining of the provincial licenses, these being regulated as heretofore by the provincial authorities.”

3. Subsections 1 and 3 of section 7 are repealed and the following are substituted therefor:

“7. The Council shall be composed of—

“(a) Three members who shall be appointed by the Governor in Council, each of whom shall reside in a different province; but until such time as the Provinces of Saskatchewan, Alberta, and British Columbia shall have been entitled to university representation, two of the three members so appointed shall be chosen from two of these provinces;

“(b) Two members representing each province, who shall be elected under regulations to be made in that behalf by the provincial medical council;

“(c) One member from each university or 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 govern in that behalf;

“(d) Three members who shall be elected by the homœopathic practitioners in Canada, each of whom shall reside in a different province.”

4. Subsections 1, 2, 3, and 4 of section 8 of the said Act are repealed and the following are enacted as subsections 1 and 2 of the said section:

“8. The term of office for members shall be four years.

“2. Any member may at any time tender his resignation by written notice thereof to the president or to the secretary of the council, and, 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 the university, incorporated medical school or college, or if a representative of

the homœopathic practitioners resigns, to the remaining homœopathic representatives upon the council."

5. Subsection 2 of section 10 of the said Act is amended by striking out the word "twenty-one" in the second line of the said subsection and substituting therefor the word "eleven."

6. Paragraph (b) of subsection 1 of section 11 of the said Act is repealed and the following is substituted therefor:

"(b) The summoning and holding of the meeting of the council, the times and places where such meetings are to be held, and the conduct of business thereat."

7. Paragraphs (g) and (h) of the said subsection 1 of section 11 are repealed and the following are substituted therefor:

"(g) The establishment, maintenance, and effective conduct of examinations with respect to professional subjects only, for ascertaining whether candidates possess the qualifications required; the number, times, and modes of such examinations; the appointment of examiners; and generally all matters incident to such examinations, or necessary or expedient to effect the objects thereof;

"(h) The admission to examination of holders of diplomas obtained outside of Canada from a medical school recognized by the council."

8. Paragraph (a) of section 12 of the said Act is repealed and the following is substituted therefor:

"(a) No candidate shall be eligible for any examination prescribed by the council unless he is the holder of a provincial license, or unless he presents a certificate from the registrar of his own provincial medical council that he holds a medical degree accepted and approved of by the medical council of the said province."

9. Section 14 of the said Act is repealed and the following is substituted therefor:

"14. The council shall make such regulations as shall secure to homœopathic practitioners, and to all applicants for registration who desire to be practitioners of the homœopathic school, rights and privileges in respect of registration by the council not less than those now possessed by them under the laws of any province, and under the regulations of the provincial medical council thereof."

10. Section 16 of the said Act is repealed and the following is substituted therefor:

"16. The subjects of examination and the eligibility of candidates shall be decided by the council, and candidates for examination may select to be examined in the English or French language. A majority of the committee conducting the examination of any candidate shall speak the language in which the candidate elects to be examined;

"2. Examinations may be held only at those centres at which there is a university or college actively engaged in the teaching of medicine or having hospital facilities of not less than one hundred beds."

11. Subsections 2 and 3 of section 18 of the said Act are repealed and the following is enacted as subsection 2 of the said section:

"2. Any person who has received a license or certificate of registration in any province previous to the date when the council has been first duly constituted under this Act, and who has been engaged in the active practice of medicine in any one or more provinces of Canada, shall, after ten years from the date of such license or 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: Provided that if the medical council of any province is not satisfied with the period of years prescribed by this subsection, such medical council may, as a condition to provincial registration, exact an examination in final subjects from practitioners registered under this subsection, and the said examination shall be held according to the provisions of the by-laws or rules of the respective provincial councils."

12. The said Act is amended by adding thereto the following section:

"24. No amendment to this Act may be proposed on behalf of the council unless previously accepted by the provincial medical councils."

13. This Act shall not come into force until the legislatures of all the provinces have enacted legislation accepting its provisions: Provided, however, that the medical board of any province may at any time order the withdrawal of the representation of the said province upon the council, by a resolution passed at a general or special meeting of the said board called for the purpose and carried by the votes of two-thirds of the members present at the said meeting, and notice of which resolution has been inserted for three months previously in *The Canada Gazette*; and in case of such resolution being passed, the provisions of this Act shall immediately cease to apply to the said province, and no more persons shall be given the right to practise medicine within the jurisdiction of the said legislature by reason of their qualification or registration under this Act.

MEDICAL PREPARATIONS, ETC.

TONSILITIS.

By CHARLES J. DRUECK, M.D., Chicago, Ill.
 Professor of Physiology at the Illinois School of Dentistry; Lecturer to the Nurses of Mercy Hospital.

In the treatment of tonsilitis it is well to remember that this disease is at first only a local disturbance, and, if promptly and efficiently treated, will remain so.

The systemic symptoms—fever, headache, etc.—only develop when there is considerable infection taken up. Therefore the following course should be instituted early in the case. The first indication is to increase local circulation, and the best therapeutic agent is heat. In the first place, confine the patient as much as possible to the nouse. Children should be put to bed. By staying indoors the patient breathes warm air only, usually free from dust and other irritating substances. The external application of the hot water bag greatly increases the venous circulation, and so relieves the congestion, as does also the drinking of hot water. This drinking bathes the parts as well as adding a large amount of water to the bowels, and so increases the action of both bowels and kidneys, and washes out the infection as it is taken up by the system. The drinking of water also increases arterial tension, which prevents stasis.

A local remedy must fill two requirements—a detergent antiseptic and a degree of permanency of effect. Many of the remedies are antiseptic, but they are not exosmotic enough to increase the circulation, or else their effect is too transient and their use tires the patient. Locally I have grown to use but one remedy, and that is Glyco-Thymoline. I prescribe equal parts of Glyco-Thymoline and water, to be used in an atomizer. I get better results with this than anything else I have used. I always use it in an atomizer because gargling is necessarily painful, while a spray is not. Glyco-Thymoline promptly relieves the dry, congested condition, and, by adhering to the tonsil, protects it from external irritation. Its anodyne effect is immediate and lasting. I instruct my patient to use it frequently, and, because it is pleasant and its action prompt, I find that they need no other instruction, but use it thoroughly. As Glyco-Thymoline is non-poisonous, it makes no difference as to how much is swallowed, and its action does not upset the somach, but tends rather to assist the destruction of any of the plugs that may be swallowed.

I find by this method of treatment that my cases are nearly all cured in twenty-four to thirty-six hours; that I need no other medication at all, because the system does not become clogged with toxines.

I report below two cases, not for their individuality, but because their prototypes are constantly occurring to every physician:

Baby J., child 6 years old, had been sick for two days, and the previous day the mother had seen sore throat, and treated it with salt, vinegar, etc., to which the child rebelled. When seen, I put child on spray of equal parts Glyco-Thymoline and hot water, and allowed sipping of hot soups and liquids; advised use of spray every half to one hour. Next morning mother telephoned I need not come, as the child was perfectly well.

Mr. H. K., subject to repeated attacks of tonsilitis, but refuses tonsillotomy, because he is afraid it may injure his voice (he is a vocalist). Several months ago I recommended spraying the throat with Glyco-Thymoline, one-third strength, twice daily, and whenever the throat is at all sore to use it frequently. He has not had an attack of sore throat all this winter.

ASSURED THERAPEUTIC RESULTS.

Assured therapeutic results can only follow the administration of active remedies. Extemporaneously prepared preparations, in lieu of time tried and clinically proven products, especially where dependence must be placed upon crude drugs of uncertain strength due to improper selection or deterioration from age, has resulted in dissatisfaction to the physician and disappointment to the patient, who has a just right to expect benefits as a result of the remedy prescribed.

For twenty-six years Hayden's Viburnum Compound has remained standard both as to quantity and quality of its component parts, as well as to the uniformly satisfactory results following its administration.

Hayden's Viburnum Compound is prepared with that care, both as to the selection of drugs and in the proper combining, to make it a perfect and dependable produce which is impossible where a substitute formula is extemporaneously prepared from the stock and with the limited facilities of the average drug store.

If in the next case of dysmenorrhea you will at least give Hayden's Viburnum Compound a trial, administering it a few days prior and during the menstrual period, we are confident that your patient will experience the same beneficial result as has been the case during the many years Hayden's Viburnum Compound has been before the profession.

In amenorrhea, menorrhagia, and metrorrhagia Hayden's Viburnum Compound has proven of unquestionable value, and as its reputation has been built up and maintained solely upon its merits as a reliable remedy in the treatment of diseases of women, we are confident that if you will use it in your next case you will be as well satisfied as have been those who have for years placed their dependence upon it. Owing to the popularity of Hayden's Viburnum Compound and its large sale, it is extensively imitated by other manufacturers. To assure satisfactory beneficial results the original H. V. C. should only be administered. We would be glad to send samples and literature upon request. New York Pharmaceutical Company, Bedford Springs, Bedford, Mass.

GRIPPAL COUGH—LARYNGITIS—BRONCHITIS.

In these affections antikamnia is indicated for two reasons: First, because of its absolute power over pain; at once removing this element of distress and placing the whole system in the best possible condition for a speedy recovery; and second, because of its power to control inflammatory processes, lowering the fever by its peculiar action on the nervous system. Codeine is strongly indicated because of its power as a nervous quietant, often quickly and completely controlling the cough. In nervous coughs, irritation of the throat, laryngitis, bronchitis, and phthisis, where the cough is altogether out of proportion to the amount of expectoration, Antikamnia and Codeine tablets will give prompt satisfaction. In fact, in cases of nervous coughs, irritable throat, so commonly attendant upon influenza and la grippe, as well as in sub-acute laryngitis, and slight bronchitis, this tablet alone will often so control the cough that the disease rapidly subsides. This is not strange when we remember that nothing could keep up this irritation more than constant coughing. In the more severe cases of bronchitis and in phthisis, the patient is not only made more comfortable, but the disease itself is brought more directly under control by checking the excessive coughing, relieving the pain, and bringing the temperature down to the normal standard.

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