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## EDITORIAL

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### THE ONTARIO MEDICAL COUNCIL

In another part of this issue we give a full report of the proceedings of the Ontario Medical Council. There are some things recorded therein with which all will agree, and there are some things from which most will dissent.

In the first place, we agree with Dr. McCallum, of Toronto, when he puts in a plea for a full detail of expenditures. The resources of the Medical Council belong to the medical profession of Ontario, for which the council is only a trustee body. The council must not attempt to escape this demand. We have had occasion in the past to aspersely criticize the Medical Council for its mismanagement of the funds entrusted to it.

We commend the action of the Medical Council in deciding to ask for legislation to reduce its numbers. At present the council consists of thirty-two members. Five representatives from a few homoeopaths are too many. Then there are members from dead colleges. The territorial can be safely reduced in numbers. With Dominion registration in sight there will be less work for the council, and the reduction of the examinations to the "finals" also removes much of its duties. This change will lead to economy and efficiency.

We cannot speak too highly of the effort of Dr. J. S. Hart, of Toronto, to have all the colleges live up to the regulation of five sessions of eight months. This is not a day too long. If what he said is true, that one college has a course of five sessions of six months, steps should at once be taken by the council to correct these in the interests of medical education.

We also concur and feel sure that the unanimous voice of the profession will uphold this view when we approve of the resolution of

Dr. J. M. McCollum, that all who wish to practise medicine in Ontario must comply with the educational standards of the council as to matriculation, attendance on lectures and passing of examinations. This was voted down, but the profession at large will hold the council strictly to account for this action. It was a distinct bid for a lowering of our standards.

It is a matter of gratification that the council appointed two of its number to co-operate in the formation of the Dominion Medical Council. It was also becoming that a motion should be adopted approving of the work of Dr. T. G. Roddick, of Montreal, for his untiring efforts to secure a common standard for Canada.

We have no quarrel with what was said regarding tuberculosis, but would respectfully submit that this is not the work of the Medical Council. All extraneous discussions should be kept out. The council is for the purpose of directing education, maintaining a standard of qualification, and the discipline of the profession when required. Political, social and moral subjects have no place on the floor of the council. In the profession there are members with very varied opinions on the use of alcoholic stimulants, and this topic should not be discussed by a body of medical men elected for entirely other purposes.

We do not concur in the increase of salaries. The information gathered from the reports of the council clearly show that with the reduction in the number of examinations the lessening of the number of appeals, and the formation of a Dominion Medical Council, the work of the officers will be materially reduced. In face of this the council increases the salary of a number of its officers.

The suggestion of Dr. E. Ryan that the fees imposed upon students might be reduced is a good one. The council now only holds final examinations. There is no need, therefore, to charge a fee for the primary and intermediate examinations, which have been handed over to the universities. We hope to see this reduction carried into effect in the very near future.

With a good deal of the discussion about osteopaths we entirely disagree. The osteopaths are a body of men who wish to make a living in a very easy way, namely, by practising medicine without qualifying to do so. Stripped of all the rubbish that has been thrown around the system, it is simply a process of massage, manipulation and suggestion, carried on by persons who, for the most part, are grossly ignorant of every principle of medicine and surgery, and many of whom never looked within a book on anatomy or physiology. The course for the Medical Council and the profession to take is that all who wish to practise medicine shall qualify in the usual manner, and thereafter may call themselves by any name they wish, so be it that they do not

do anything that is infamous and disgraceful in a professional sense. When a man secures his license to practise it is nobody's business that he should call himself a homeopath, or an osteopath. The one thing that is essential is that if he is going to diagnose and treat disease on his own responsibility he must be fully qualified. Mere massage is no system of medicine. It is only a very minor department of therapeutics.

On this great principal of one common standard for all the medical profession should stand united. If it does not the electrotherapeutists in due course will come along and ask that they be recognized; and for good reason, as they practise a minor department of general therapeutics. So, too, the chiropractors will say "we rub and pull and twist parts into their proper places," and must be recognized. Then the optometrists will come on like Caesar's ghost to Brutus' tent, and say "we too wish to come in." Any body of men may select a name for their system and on the plea of "vested rights" demand recognition. To all this let the medical profession say "No!"

One action of the Council we condemn in the strongest terms. This journal vigorously opposed the fees taken by the members in past years. A year ago it was agreed that the remuneration should be \$10 for each half day. This year the Council voted that the fee should be \$100 for the session. The session only lasted four days. This means \$20 extra to each member, or a total of over \$600 for the session. This sort of thing must cease.

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#### SIR CHARLES TUPPER, M.D., G.C.M.G., C.P., P.C.

Dr. Sir Charles Tupper has passed his ninetieth birthday. He is the only living member of that group of men who sat around the same table in 1867 and framed the conditions that made Confederation a possibility. He was born in Amherst, Nova Scotia, in 1822. He studied medicine in Edinburgh and became a member of the Royal College of Surgeons in 1843. In 1857 he became a member of the executive council of his own province and a little later provincial secretary.

He became Premier of Nova Scotia, and, while he held this office, he was a leading spirit in inducing his province to cast in its lot with the other provinces in the formation of the Dominion of Canada in 1867. He was soon after this made a member of the Dominion Privy Council and later a member of the Privy Council of the Empire.

He has filled the high offices of Minister of Inland Revenue, of Customs, of Public Works, of Railways, and of High Commissioner in London. He was created a knight in 1879, and a baronet in 1888. In 1896, he became Prime Minister of Canada, an office which he held only for a short time.

His public services to Canada have been many and great. He was one of those who aided very much in carrying through the legislation that made the Canadian Pacific Railway a possibility. While we think of these services, we must not forget those to his own profession. He was one of those who took an active share in organizing the Canada Medical Association and was its first president.

To the aged statesman and doctor we extend our greetings. We rejoice that he has been spared so long to see the fruits of his labors for his country and his profession. With admiring Juliet we say:—

He was not born to shame,  
 Upon his brow shame is ashamed to sit;  
 For 'tis a throne where honor may be crowned,  
 Sole monarch of the universal earth.

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#### THE HEALTH OF THE CHILD.

It takes a long time to arouse public opinion, but in one direction it has been stirred very vigorously, namely, that of paying proper attention to the many conditions that concern the welfare of the child. In Montreal during October of this year there is to be a convention on the health of the child.

During this convention such varied topics as heredity, the feeding of the child, infectious diseases, and the clothing of the child. There is ample scope in this programme for much useful work. It is a shame to a country like Canada that the infant mortality is so high. With the diffusion of knowledge there will be marked improvement, for in this case knowledge is power.

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#### DETENTION ASYLUM FOR TORONTO.

We have already urged that there should be accommodation provided in Toronto for patients who may become mentally deranged, and whose future has not become clear. The government has decided to remove the asylum from Toronto to Whitby and plans are agreed upon for buildings to cost about \$600,000.

This change would leave Toronto with only the jail to fall back upon, or, for overnight, one of the cells in a police station. This will not do. Toronto must do better than this for its insane. One may go insane as one may contract typhoid fever and provision for both must be made. We agree with the position expressed by Controller Me-

Carthy as follows: "The government's business is to take care of the insane. It is our duty to take care of people until they are adjudged insane and committed to an asylum. Let us end this practice of sending insane people to jail. Public opinion in this city is one voice in this matter."

It was decided by the council that a site be secured at a cost of about \$100,000 and authority given the Board of Control to take steps towards this end. We are glad that action has been so prompt in this very important matter. There ought to be no delay, as there must be a building ready for use before the asylum disappears. It is an old saying that time does not wait on any man. Toronto must have a local asylum for acute cases.

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### THE NEW ASYLUM AT WHITBY.

The government has secured land to the extent of 600 acres overlooking the bay and lake at Whitby. On this site a series of buildings are to be erected costing in the neighborhood of \$700,000.

There will be separate cottages for male and female patients, four for each class, with capacity for fifty patients.

Cases that are mild and in an early stage will not enter the asylum proper, pending study of their condition. Convalescent patients will be cared for in proper accommodation.

Those who may be suffering from consumption will have separate accommodation. In this way it is hoped to prevent the spread of this disease.

The building is to be constructed of cement blocks made on the Guelph Industrial Farm. Much of the carpenter work is to come from the same place. The buildings are of the fireproof type.

The buildings are two miles from the station, but a siding will be run in by the Grand Trunk Railway.

All the patients who are physically fit will be kept at work on the farm or doing some useful work on the buildings. In this way employment will be found for both male and female patients. This is the plan that has been so successful at the epileptic colony at Sonya, New York.

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### THE DRUG HABIT.

From experts from the large cities of the world comes the information from time to time that the drug habit is steadily increasing. This one might expect. One of the alarming statements of recent date is from Paris, France.

The report goes to show that a number of druggists, contrary to law, sell morphine, opium, and cocaine at exorbitant prices. The custom for having resorts where the habitués betake themselves is growing.

There are so many who live strenuous lives, are on the verge of despair, and who lead single and solitary lives that they resort to these "dens." This condition is one of the prices that civilization brings with it.

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#### A FINE OR AN OPERATION.

Mose medical men in Toronto know that children are sent home with notes that they have enlarged tonsils, or adenoids, or both. Now, the parents or guardians, not being doctors, do not know any better and generally have the operations required. In some cases they consult their family physician, who may think that an operation is called for, or that the child had better be left alone.

This sort of thing can be carried too far and will tend to drag the medical inspection of public school children into contempt. We do not wish to be understood as saying anything against medical inspection, which we urged in the first place and have steadily supported since, but we contend for common sense and moderation.

We understand that Dr. Struthers has stated that enlarged tonsils must be removed. This is backed up by the Commissioner of the Juvenile Court, who threatens parents who object with a fine of \$500. This is going altogether too far and public opinion will not tolerate it. A leading newspaper said the other day on this subject:

"The status of a minor in the case of swollen tonsils should be considered as a part of the question of parental rights and parental responsibilities. At what age may a boy or girl reject the decision of a majority of the medical profession? Professional status and professional authority may also be considered. The chances of winning or losing in law and in the treatment of diseases are matters for professional opinion. But whether chances be taken in the courts or on the operating table should be matters for the clients and patients to decide. It may not be wise to put unlimited authority in the hands of a profession financially interested in the multiplying of operations, however honorable and unselfish the record of that profession may be."

We hope to hear of no more such statements regarding the removal of tonsils. The man or woman has a right to choose whether an operation shall be done or not. Likewise, parents have a right to say what shall be done to the throats of their children.

Adenoids are not fatal. Their removal is an operation of choice and not of urgency. It is not like neglecting proper medical treatment for disease like diphtheria, or for an accident. In the case of the tonsils there are many high authorities who condemn in very strong language the too ready removal of the tonsils. Opinion is like the pendulum—swings back again. There is a growing feeling that we have too much tonsillotomy.

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### THE TORONTO GENERAL HOSPITAL.

There has been an effort made to retain the old General for the east end. We have already expressed our view as favoring some hospital accommodation for the eastern portion of the city.

We do not favor a hospital under the control of the municipality. In the case of contagious disease or the insane it is proper that there should be municipal institutions. Not so in the case of general medical and surgical hospitals.

There are a number of hospitals in existence now that could be brought under municipal control. There are the new General, St. Michaels, the Western, the Hospital for Incurables, Grace, and the Hospital for Sick Children. To all of these the city has already made substantial grants towards the buildings funds and has placed them on the list as suitable institutions to receive city poor patients.

If the city undertakes a municipal hospital in the east end it would be of a local character. This is not the ideal of a city hospital. It would not require to be large and relatively to the number of patients would be expensive. It could have no reason for its existence other than to care for the city's poor. In this respect it would come in competition with the other hospitals that are now city hospitals in so far as they have received city grants and have undertaken to do certain things for the city in return.

Then, again, a city hospital would complicate the situation seriously in the matter of teaching. The city order patients would be under the care of any doctor who sent the case into the wards. This would remove these cases from the range of clinical teaching. This would be a positive misfortune. This is now one of the greatest medical educational centres in the world, and who would do anything to injure it?

It must be admitted that if the city undertakes to conduct a general municipal hospital the demand will be made, and could not be resisted, that every medical practitioner would have a right to attend the patient he knew. This would have the effect just pointed out so far as clinical teaching is concerned. This would only be regarded as a grave mistake

after so much money has been advanced already in aid of hospital accommodation for the very reason that it would aid in medical education. Why build with one hand and pull down with the other?

A good deal has been said in favor of the city order patient having the right to be attended by the doctor he may know. There is no real foundation for this. They cannot pay the doctor and, therefore, the attendance might better be done by one who can make use of the case for teaching the students, and in the second place, the attendance will be thus mostly from a member of the teaching staff. This is not reflecting in the least on the ability of the general practitioner. We take the ground that city order patients should be used for the definite purpose of bedside teaching. A municipal hospital would be a departure from this principle, and, further, it would be a local affair.

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#### THE PREVENTION OF CONSUMPTION.

The Canadian Association for the Prevention of Consumption has drawn up a series of rules for the prevention of the disease. These rules are being given wide publicity.

Attention is drawn to the evil effects of overcrowding, ill ventilated, dark and dirty rooms, insufficient and infected food, alcoholism and other forms of dissipation, and neglected colds and debilitating conditions.

Rules are given to the effect that a consumptive should not spit at large, he should use a Japanese paper handkerchief. In his room he should use a paper spitting-cup, and should be in the open air as much as possible.

The rooms occupied by consumptives should be sunny, no other persons should sleep in them; there should be no carpets, woodwork should be wiped daily with a disinfectant, all clothing should be changed and cleansed frequently, tableware should be kept for the patient only, the room should be thoroughly disinfected before it is used by another.

Disinfection rules are given. The face should be washed with a carbolic soap and the hands and body with a strong alkaline soap. All washable goods should be boiled in soap suds. Goods that cannot be washed and boiled should be disinfected by a steam sterilizer or apparatus. Such solutions as carbolic water, water with hardwood ashes, and hot water may be employed.

These instructions will do much good. Many may be willing to do what is best if they only knew how.



## ORIGINAL CONTRIBUTIONS

## PRESIDENTIAL ADDRESS\*

BY HERBERT A. BRUCE, M.D., F.R.C.S.,

President of the Ontario Medical Association; Associate Professor of Clinical Surgery, University of Toronto; Surgeon to the Toronto General Hospital.

OWING to the custom which has prevailed of electing your President at the end of the Annual Meeting, this is the first opportunity that has been afforded of thanking you for the distinction which you were good enough to confer in electing me to fill this very important position. While fully appreciating the honor which you have done me, and for which I am most grateful, at the same time I am fully aware that it carries with it very serious responsibilities. On looking back over the long list of distinguished men who have preceded me, I realize that it is a difficult task to maintain the high traditions of this office. I need scarcely say that I have done my best to justify the confidence you have placed in me, and have been exceedingly fortunate in securing on the various committees the assistance of able and energetic men, who have devoted a great deal of time and consideration to the working out of the details connected with this meeting.

As you will see from the programme, we have very considerably altered the character of the meeting. Realizing the interest and value of clinical work, instead of having sessions devoted to the reading of papers, we have endeavored to make the meeting entirely a clinical one, and I trust that the result will justify the experiment.

In view of the fact that members from a distance could not conveniently bring cases to the meeting, and wishing to give them an opportunity of taking part in the proceedings, we have asked them to give us short case reports, and have in this way secured a few short papers. We felt that the presentation of clinical cases, with the ensuing discussions, would be of much greater interest and advantage to the profession than listening to a number of lengthy papers. Our policy has been to invite members outside the city of Toronto only to take part in the symposia and to read papers, and it is only because, in some of the sections, we failed to secure a sufficient number in spite of repeated appeals, that we have had to fall back upon some of the Toronto members. I think the members of the Association generally do not fully

realize the extreme difficulty, often amounting to impossibility, of securing papers from members in country districts.

Whilst we have endeavored to provide a varied and interesting clinical programme, we have not been unmindful of the social side, and I therefore hope you will find the meeting both instructive and enjoyable.

I should like to take this opportunity of referring to the great loss which the profession in the Province of Ontario has sustained in the untimely and tragic death of a former President of this Association, the late Dr. James F. W. Ross. He always took the keenest interest in the affairs of this Association, and was present at our last meeting at Niagara Falls. He could always be relied upon to do his utmost to further the interests of his beloved profession, and it is scarcely necessary for me to say that the profession, as a whole, and this Association in particular, has lost a very staunch friend, and one whose place it will be difficult or impossible to fill.

I should like also to refer to the loss which the profession throughout Canada has sustained in the death of Dr. James Bell, of Montreal. He was one of our truly great men, and has done a great deal to elevate the standing of the Canadian medical profession.

As each year of my professional life passes, my conviction becomes stronger that an organization of some kind to bind the profession together is an absolute necessity, and that for this purpose we could have nothing better than our Ontario Medical Association, which is a potent influence for the good of the profession and the public.

When it was first suggested that this Association should become a branch of the Dominion Medical Association, many of us feared that in this way we might lose our identity. As the scheme has eventually materialized, however, I think it is a distinct advantage to the Ontario Medical Association. Whilst we have retained our autonomy, and are thriving and prosperous, we are at the same time—I think I may say without boasting—the most important branch of the Dominion Association, and can feel that our interest is not merely provincial, but that we have a larger and wider outlook through our connection with the National Association.

I think it very desirable that there should be an increase in the number of small County Medical Societies, and I should like to suggest that for this purpose the Province be divided into ten districts, corresponding to the ten health districts recently established by the provisions of the new Health Bill. As there are forty-seven counties in the Province, this would mean that each society would include four or five counties, which appears to me to be a practical arrangement. Then the method of securing membership in the Ontario Medical Association

would be simplified by accepting the members of these smaller societies, which would obviously be in a better position to determine their qualifications.

When the Ontario Medical Council was first established there were three Licensing Boards in Canada, in addition to the Medical Schools and Universities, namely, the Upper Canada, the Homœopathic and the Eclectic Medical Boards. The Universities, in addition to conferring degrees, really possessed licensing power, inasmuch as the holder of a University degree was entitled to practice medicine on proving his identity and paying a small fee. The Provincial License enabled the holder of it to practice in the Province conferring it, or in fact in any other Province, so that as a matter of fact there were in Upper and Lower Canada, exclusive of the other Provinces now constituting the Dominion, seven or eight Licensing Boards responsible to no central authority. On the establishment of the Ontario Medical Council it became the central authority and the only licensing body.

Before this time the schools and universities fixed their curricula, both for matriculation and professional examinations; some of the Licensing Board required no standard of matriculation at all, and the professional acquirements necessary to become a practitioner of medicine were of a very inferior character.

The first step taken to remedy this state of things was the "Parker Act," passed in 1865, providing for the formation of a Council with power to fix the standard of matriculation and that of the medical curriculum, but giving it no power to enforce that standard. The Homœopathic and Eclectic Boards were not interfered with, and the provisions of the Act were found to be very defective. An arrangement was then made with the homœopaths and eclectic and the various schools and universities, whereby the whole of the profession became subject to the Medical Council of Ontario, as a central authority. This Council was made up of representatives, elected from and appointed by the general profession, the medical schools and universities, and also from the homœopathic and eclectic bodies. This Act came into force in 1868, and conferred upon the Council power to fix the standard of all examinations and appoint examiners to conduct them.

Prior to 1867 the matriculation examination of our colleges was simply a matter of form, and could be passed at any time before going up for the degree. Now it is equivalent to a second class teacher's certificate, with compulsory Latin and physics and the science course. I believe that at the present time all the colleges and universities in the Dominion require four years of study before a student goes up for his degree, and in McGill University and the University of Toronto five years are required.

The President of the University of Toronto, in his last published report, suggests that the entrance standard for medicine in the University of Toronto shall be senior matriculation, which really amounts to the first year at the University, and I may say that recently the Medical Faculty has recommended to the Senate that an examination equivalent to that of senior matriculation shall be demanded of all students entering the Medical Faculty of the University of Toronto in future.

Last year the Ontario Medical Council very wisely decided to discontinue its Primary and Intermediate Examinations, accepting the Primary and Intermediate Examinations of the Universities, and only requiring a Final Examination in Medicine, Surgery and Obstetrics. As soon as the Dominion Medical Council comes into operation, it would seem unnecessary for the Ontario Medical Council to hold even the Final Examination, as a student would naturally prefer to take the examinations of the Dominion Medical Council, which would entitle him to practice in any part of the Dominion. This takes away one of the functions of the Ontario Medical Council, and while it may have other duties to perform of a sufficiently important character to justify its existence, I think there is a general feeling that its numbers might, with advantage, be greatly reduced.

The number of homœopathic representatives is altogether out of proportion. Through the courtesy of the Registrar, Dr. Bray, I have learned that there are 48 homœopaths practising in the Province, and 3,280 regular practitioners. These 48 homœopaths have 5 representatives on the Council, that is to say 1 to about every  $9\frac{1}{2}$ . The 3,280 regular practitioners have 18 representatives, and if we add to these the six representatives from the colleges, making 24 altogether, we may say that they have one to every 136. Amongst the members elected from the colleges we find that there is a representative for Victoria University, for Trinity University and for Ottawa University, none of which have Medical Faculties, and I can see no reason whatever why they should continue to have representatives on the Council.

I would suggest that the Ontario Medical Council consist of ten members, one to be elected by the homœopathic physicians, and three to be elected by the Universities having Medical Faculties, leaving six to be elected by the general profession. Even this gives the homœopaths a predominance in the Council quite unjustified by their numbers, and with the diminished amount of work required from the Ontario Medical Council this should be a sufficiently large body.

*Medical Education.*—The question of medical education is at the present time receiving a considerable amount of attention, and both the teaching and practice of medicine are passing through a period

of evolution. In the United States medical education has been a subject of discussion for a number of years, and committees have been appointed by various societies, more especially the Association of American Medical Colleges, in conjunction with the Confederation of Examining Boards of the United States and the Council of Medical Education of the American Medical Association, to enquire into the equipment, entrance requirements and curricula of the medical schools.

In 1905 the Carnegie Foundation was established by Mr. Andrew Carnegie to investigate the subject of University Education in general, and a special committee was appointed to consider medical education in the United States and Canada. The report of this committee and the recommendations of the Council on Medical Education of the American Medical Association show that the most urgent indications are reduction in the number of medical schools, elevation and uniformity of entrance requirements, maintenance of well equipped laboratories with capable teachers, and clinical training in a hospital in intimate relationship with the medical faculty; that is to say, in a properly constituted teaching body, there should be a hospital under the direct control of that body. The report of the Carnegie Committee also emphasises the fact that the medical profession, both in the United States and Canada, is at present over-crowded by poorly trained physicians and surgeons.

At the meeting of the Council on Medical Education, held at Chicago on February 29th of this year, the Secretary reported that whereas in 1906 there were 170 medical schools in the United States, constituting half the total number existing in the world, the number had now been reduced to 120. This reduction is due to the closing of some badly conducted and imperfectly equipped schools and the amalgamation of others.

As regards entrance requirements, Dr. Colwell stated at the above meeting that 47 of the 120 remaining medical colleges now require that a year or more should have been devoted to physics, chemistry and biology, together with a four-year high school course. Twenty-nine colleges require a minimum of two or more years' work in a college of Liberal Arts, with a four-year course. Nine State Examining Boards have now adopted preliminary requirements in excess of a four-year high school education. Of the 120 colleges, 79 are connected with Liberal Arts Colleges or Universities, but of these 33 only are in intimate relationship with Universities. During the last seven years the college terms have been lengthened, new methods of teaching adopted, more salaried teachers employed, more endowments secured, new buildings erected, better laboratories and laboratory equipment, and better clinical facilities provided. Several of the larger medical schools have been reorganized, have built teaching hospitals and adopted higher standards

of education, and the teaching of medicine has now been placed to a great extent on a University basis throughout the United States.

As regards Europe, in London there is more clinical material available than in any other city in the world, and the conditions for teaching are most favorable, and in my opinion there is no place at which one can get a better training in the fundamental principles underlying the practice of medicine. This, together with the exceptional clinical facilities, makes London the greatest medical centre of the world. In the University of Berlin no senior professor practises medicine. The Universities, which are maintained by the State, pay salaries to the professors, surgeons and physicians, and also all expenses connected with the laboratories.

I am of opinion that, as education is a matter within the jurisdiction of the Provinces of this Dominion, it is the imperative duty of the Provincial Governments to see that a certain definite standard of medical education is maintained, the individual medical colleges retaining their charters only if they continue to provide this standard. It will be their duty to see that these colleges are provided with proper laboratory accommodation and facilities, and—what is perhaps equally or more important—a sufficiency of clinical material in hospitals connected with or under the control of the college.

Medical education attains its maximum efficiency only when it is based upon a good system of general education, and is supported by the scientific and literary atmosphere of a university. Three of the greatest advances in modern medicine are due to laboratory work, namely, the work of Faraday in physics, of the Curies in chemistry, and of Pasteur in biology. Sir William Osler thinks it advisable that this type of university work should be extended into our medical schools, and that we need “an active invasion of the hospitals by the universities.” In the city of Toronto we now have what may be described as “an active invasion of the hospital by the university,” in that the University of Toronto now has control of the Toronto General Hospital, thus making the latter to all intents and purposes the University Hospital. We have here what is generally recognized as the essential thing in the training of medical students, namely, the intimate connection with and active control of the hospital by the university. When our new arrangements are in working order we hope to be able to give our students a great deal of clinical work in the hospital, so that they may thus have an opportunity of acquiring that familiarity with disease processes in the living subject which is so essential as a qualification for their life's work.

Medical education in Canada has always been up to a high standard. But in this connection it should be borne in mind that, owing to the

development of the preliminary sciences, such as physiology, pathology and biology, the work of the student has practically doubled in amount, and it is continually increasing. In view of this increased demand on the time of the student a five-year course in medicine has now been adopted in all the leading Canadian medical schools, the final two years being devoted to practical work.

All writers on medical education emphasize the paramount importance of thorough training in practical work, with opportunities for the students to come into actual contact with patients. The efficiency of the practitioner, the welfare of the public generally, and the adequacy of the public health service, are all dependent upon the quality of the training given in the medical schools, and the ideal at which we are aiming is uniformity in the requirements and standards exacted by all the examining boards throughout the country. We trust that this happy result will follow the adoption of the "Canada Medical Act," establishing interprovincial registration, and a license which will enable the holder of it to practise in any part of the Dominion.

*The "Canada Medical Act."*—The "Canada Medical Act," which has for its object the establishment of a uniform standard of examinations and qualifications throughout the Dominion of Canada, was introduced in the Senate by Dr. Roddick in 1902. It was passed, but it was found impossible to bring the Act into operation at that time, owing to the fact that opposition was made by some of the Provinces on the ground that their interests had not been sufficiently considered.

Owing to Dr. Roddick's perseverance and devotion to the work in connection with this Bill, and that of a few others who co-operated with him, he succeeded in convincing the various Provinces that it was to their interest to pass this Bill, and consequently an amended Bill was passed in the 1911 session of the Dominion Parliament. I wish here to express my sense of the debt of gratitude which we owe to Dr. Thomas G. Roddick for the unprecedented services which he has rendered to the entire medical profession of Canada.

This amended Bill only became operative when a so-called "Enabling Clause" had been passed by every Province. All the Provinces have now passed this "Enabling Clause," Ontario being the last to do so. This means that now the "Canada Medical Act" is in operation, and it only remains for the Dominion Medical Council to be established in accordance with the terms of the Bill, which are briefly: That the Council shall consist of (a) three members, appointed by the Governor-General in Council, each residing in a different Province; (b) Two members representing each of the nine Provinces, to be elected by the Provincial Medical Council; (c) One member from each University or

Medical College, which has power to confer degrees in medicine; and  
(d) Three members elected by the homœopathic physicians in Canada.

*Osteopathy.*—The Bill which was recently introduced by Dr. Jamieson, and which was withdrawn at the last session, contained a clause defining medicine, which it is hoped will be incorporated in a Bill which will probably be passed at the next session of the Legislature. It is a great pity, as we all know, that this was not defined by the Legislature many years ago, when the Council was established in 1867, and it is desirable that the profession should be thoroughly conversant with the terms of this Bill.

The Bill provides for the registration of any person who has matriculated in accordance with the requirements of the College of Physicians and Surgeons of Ontario, and holds a diploma granted by a School or College of Osteopathy that meets the requirements of the Ontario Medical Council and the Governor in Council. It also provides for the registration of persons who have been practising osteopathy in Ontario prior to the passing of this Bill, provided they hold such diplomas as meet the requirements of the Ontario Medical Council and the Governor in Council. It also provides that any person shall be held to practise medicine within the meaning of the Act who shall by advertisement, sign, or statement of any kind allege ability or willingness to treat diseases, or to prescribe or administer medicines or treatment of any kind for diseases, defects, deformities or injuries, but specifies that this section does not apply to the practice of dentistry, pharmacy, the usual business of opticians, vendors of dental or surgical instruments, apparatus and appliances, nurses, chiropodists, bath attendants or proprietors. Every person registered under this Act as a practitioner of osteopathy in the Province of Ontario shall be entitled to recover fees for professional attendance.

This amendment to the "Ontario Medical Act," which permits of the registration of osteopaths, is not such a monstrous thing as it seemed at first. I take the view that a man is justified in practising any pathy he wishes, provided he has obtained a sufficient knowledge of the anatomy of the human body, its physiology and the disease processes to which it is liable. It will be obvious to every sane man that such a knowledge is absolutely essential; for how can anyone attempt to treat a disease without understanding the nature of the disease in question or the normal physiological conditions?

At the present time the public is at the mercy of a large number of uneducated charlatans, whose work is not only of no value in any real disease, but is often of a highly dangerous character. We all met with cases in which this lack of knowledge has resulted disastrously to the unfortunate patient.



If, as is proposed in this Bill, those wishing to practise osteopathy must pass an entrance examination equal to that of any practitioner of medicine, and in addition pass a Primary and Final Examination, which would include all the essential subjects, substituting their pathy for medicine, we should have no objection to their being licensed by the Ontario Medical Council. In this way the public would be protected by requiring of osteopaths a sufficient knowledge of these fundamental subjects, which is absolutely essential before attempting to treat the sick. If, after they have passed these examinations, they still think there is any value in their particular pathy, we have no objection to their practising it. I would take a similar attitude towards any other pathy.

When the Ontario Medical Council was organized the homœopaths and eclectic were taken in and the same examinations prescribed for them as for regular practitioners. What has been the result? The eclectic have practically ceased to exist. Very few homœopaths have been taking the examinations, as is shown by the fact that at the present time only 48 are practising in the Province of Ontario, but unfortunately I am unable to ascertain how many there were at the time of the formation of the Ontario Medical Council.

The chief objection I have to the Bill is that it proposes to take in a number of graduates of osteopathic colleges without their having to pass any further examination. I think that a clause should be added requiring all these men to pass an examination before being registered, and although we may, for the time being, have to accept qualifications which are decidedly less than those which will be exacted from future candidates, we shall certainly have made a material advance in securing for the public very valuable protective legislation.

In support of the contention that those who are practising osteopathy at the present time should pass an examination I should like to briefly refer to the Carnegie Report:—

Amongst medical sectarians the Committee includes homœopaths, eclectic and osteopaths, all of whom admit in theory that medical education should be based upon the fundamental sciences of anatomy, physiology, pathology and bacteriology.

It is stated that the catalogues of the eight Osteopathic Schools in the United States are a "mass of hysterical exaggerations, and fairly reek with commercialism." Entrance standards are conspicuous by their absence. In the catalogue of the parent school at Kirksville it is stated that an applicant will be accepted if "he pass examinations in English, arithmetic, history and geography," but he may be admitted even if he fails to do this. The Cambridge School (Massachusetts)

states that "a diploma may be accepted or an examination required if deemed advisable by the directors."

Whatever his opinions may be on the subject of treatment it is essential that the osteopath should be trained to recognize and to differentiate between the diseases he professes to treat, and not one of these Osteopathic Schools is in a position to give the training in physiology, pathology, chemistry and bacteriology which "osteopathy itself demands." In none of them is there any effort to connect the "laboratory teaching with clinical osteopathy," and in none is there "anything approaching the requisite clinical opportunities."

In the eight Osteopathic Schools there are now over 1,300 students, paying about \$200,000 annually in fees, and for this they "receive an education which is practically worthless."

All candidates who intend to practise surgery—whether osteopaths or not—should be required to pass a uniform examination in this branch of treatment. It is absolutely essential that all who undertake the treatment of disease, irrespective of the form of treatment they propose to adopt, shall be educated in such a manner as to render them capable of distinguishing between the various diseases which may come under their observation.

*Public Health.*—The rapid development of bacteriology, and the establishment of the germ theory of infective diseases, due mainly to the scientific investigations of Koch and Pasteur, have led to corresponding development in practical and preventive medicine. Recognizing the importance of this development in relation to public health, Senator Owen, of Oklahoma, introduced a Bill in Congress about two years ago to provide for the creation of a Federal Department of Public Health, which was strongly supported by the American Medical Association and various other Medical Societies in the United States.

The object of this Bill was defined to be "all matters pertaining to the conservation and improvement of public health, and to collect and disseminate information relating thereto." It also provided that the new Department of Public Health should include: (1) The Public Health and Marine Hospital Service; (2) Foods and drugs, from the Bureau of Chemistry, which is now in the Department of Agriculture; (3) Vital Statistics, now in the Department of Commerce and Labor.

An amendment draft of the Owen Bill has recently been brought before the Senate, which differs from the original Owen Bill, in that it provides for an independent health service, at the head of which will be a director appointed by the President, but who is not to have a seat in the Cabinet, whereas the original Owen Bill specified that the head of the department should be a physician, who would also be a member of the President's Cabinet. The Amended Bill provides for

the appointment by the President, with the approval of the Senate, of three Commissioners of Health, to act as assistants to the Director, two of whom shall be skilled sanitarians and one a skilled statistician.

On March 22nd, of the present year, Senator Smoot brought a Bill before the Senate, which contains practically the same provisions as regards the Federal Government, but varies essentially from the Owen Bill, in that it arranges for the public health service to be under the control of the Secretary to the Treasury, and to be managed by an Assistant Secretary, who shall devote the whole of his time to Public Health work, thus ensuring representation in the Cabinet. The Medical Bureau, including the present Public Health and Marine Hospital Service, is made the predominating Bureau, and it is proposed to transfer Vital Statistics to this Department.

I have referred to this contemplated legislation in the United States in order to show what is being done elsewhere in regard to public health matters. Many of us have felt for years that a Federal Department of Public Health should be created, with a responsible Minister at its head, and representations were made to the late Government course of the meeting, urging the Dominion Government to give this matter early and favorable consideration.

Early in the present year the Academy of Medicine, New York, appointed a committee on Public Health, Hospitals and Budget for the purpose of investigating existing conditions, and to give expert medical opinion upon various matters, including provision for contagious diseases, school sanitation and the use of public funds in the maintenance of public health, one of the most important being the consideration of the health of school children. The Committee is not to interfere in political matters, but to endeavor to give such advice as will be serviceable to the community as a whole. This will include attempts to educate the laity to minimize conditions which tend to the spread of occupational diseases, and to educate general practitioners in matters relating to municipal health, sanitation and hygiene. We might with advantage follow their example

*Division of Fees.*—Considerable attention has recently been directed, more especially by the various Medical and Surgical Societies throughout the United States of America, to the prevalent practice of fee splitting, or the division of fees between consulting surgeons and physicians, or physicians and consulting physicians.

Judging by the papers which have recently been published, and the Reports of the Committees which have been appointed to enquire into the subject, this reprehensible practice appears to have become exceedingly common. It is increasing to an alarming extent amongst the younger members of the profession, and has even been adopted in

some cases by men of good standing, owing to the fact that it suits their convenience and that they find it profitable.

The division of the fee is accomplished by various methods, and is based on commercialism alone. It means nothing more or less than the payment by the consultant of a commission to the general practitioner, with the object of encouraging the latter to continue to send his patients where he is most likely to receive a share of the money paid for relief or attempted relief, irrespective of the skill and experience of the consulting surgeon or physician in question. The practice is even more common amongst surgeons than physicians, and is carried on without the knowledge of the patient, who is ignorant that a portion of the money goes to the general practitioner who has recommended the surgeon.

There can be no question that it is a pernicious system, fundamentally opposed to the ethical traditions of the profession, and that it cannot be advocated by any honorable man. It represents a form of collusion between the consultant and the general practitioner, which is compromising and demoralizing to both parties, in that it is invariably practised without the knowledge of the patient, and is at the same time disadvantageous to the latter.

As regards the causes responsible for the prevalence of this evil, it is stated in the Report of the Committee of the Erie County Medical Society that the Committee was practically unanimous in the opinion that the principal predisposing factors in commercialism are the overcrowding of the medical profession, a low standard of medical education, and a lack of appreciation of professional ethics. The Committee also includes amongst the contributory causes contract practice and its inadequate remuneration, and the fact that the general practitioner is often under-paid. This state of things should be rectified in a legitimate manner, by educating the public to understand that, in view of the advances in medicine and surgery, and the consequent increase in responsibility and work necessitated by modern methods of diagnosis, the general practitioner is justified in demanding a larger fee in such cases. He frequently has to take his patient to a consulting physician or surgeon, and if an operation has to be performed he has to be present. It goes without saying that he should receive adequate compensation for such services, and it is unreasonable to expect him to spend his time in this way without remuneration. In spite of the increased cost of living, and the advances in medical and surgical science, the family practitioner is still receiving the same compensation as his predecessors of two or three generations ago. If the public will compensate the family physician fairly and promptly for his services, and insist that all transactions between the physician and the consultant

be carried on with the full knowledge of the patient, the cause and the possibility of this evil will speedily disappear.

The Committee also points out that the prospect of receiving a commission sometimes results in exaggeration of the necessity for operation, and thus leads to indiscriminate, reckless and useless surgery, performed in some instances by inefficiently trained and inexperienced surgeons. Although the general practitioner is assumed to recommend his patients to consult a competent surgeon, the possibility of receiving 50 per cent. of the fee may interfere with his discrimination.

It was suggested at a meeting of the Board of Regents of the University of New York, held on April 19th, 1911, that the legislature be requested to consider the advisability of prohibiting the consulting physician or surgeon from paying fees to another practitioner without making known the fact of such payment to the patient or the relative or friend acting on his behalf; and also that it might be advisable for the Board of Regents to announce that it will revoke the licenses of physicians or surgeons determined to have been guilty of this practice.

Dr. A. S. Draper is of opinion that correction of the evil must come from within the profession itself by means of the local organization, and that if this is not done the public will probably take the matter into its own hands with painful results.

The Academy of Medicine, Toronto, appointed a Committee to consider this question, and the following Resolutions were passed at the Annual Meeting on May 7th of this year:—

1. "That the payment of a commission to any person or persons who may be instrumental in influencing a patient or patients to apply for professional advice is wrong in principle, and detrimental to the best interests of our profession."

2. "That when two or more practitioners are engaged in a case, the disposition of the respective fees shall only be made with the knowledge and consent of the patient."

3. "That we agree that the attending physician has often been inadequately paid for his services."

I would suggest that this matter be dealt with by this Association at the present meeting, and that a similar action be taken to that of the Toronto Academy of Medicine.

*Progress in Surgery.*—The last two or three decades have been a period of marvellous development and evolution as regards surgery, and there is no question that the chief factors to which this evolution is due are the discoveries of the bacterial origin of disease, of antiseptics, and the more recent development of asepsis.

I should like here to refer to the great loss which the medical world has recently sustained in the death of that distinguished scientist, Lord

Lister, which occurred at Walmer, England, on February 10th of this year. Many of you will remember the pleasure we had in meeting that kindly and unassuming man, with his gentle face and wonderful personality, at the meeting of the British Medical Association in Toronto. His great achievements in the domain of medicine and surgery are well known to every member of the profession, and to his practical application of the discoveries of Pasteur we owe the fact that it has now become possible to secure the kindly healing of wounds without the suppuration which to the older surgeons seemed a necessary part of healing, and which made any operative measure extremely dangerous. Even in the cases in which recovery did ultimately take place it was accompanied by such complications as erysipelas, hospital gangrene and pyemia, which can now be avoided in practically all cases.

Another factor which has contributed to the reduction in the mortality of surgical operations is that in the majority of cases the surgeon is now consulted at an earlier stage of the disease than formerly, when the risk attendant on many operations was so great that they were undertaken only as a last resource. We now recognize that in many cases delay entails considerably greater risk than immediate operation, and that prognosis is often more favorable if the latter is undertaken at the earliest possible moment.

The above remarks apply more especially to what may be termed acute abdominal emergencies. The degree of perfection to which asepsis has now been brought renders it possible to open with safety the cavities of the body, and to expose freely the area of disease, thus enabling the surgeon to operate with greater confidence. The knowledge of surgical pathology thus acquired has resulted in a co-incident development of methods of diagnosis, and we have learnt that peritonitis represents only a late result in very various diseases. It has also led to more intelligent after-treatment, and instead of keeping the intestines at rest as long as possible after an abdominal operation, as was formerly the custom, the aim of the surgeon now is to obtain resumption of normal physiological and mechanical intestinal functions as soon as possible, and thereby to prevent the supervention of peritonitis.

*Appendicitis.*—I should like here to refer very briefly to the treatment of acute appendicitis. For many years this subject has been discussed freely in our medical societies, and different opinions held as to the proper time for operation, but at the present time surgeons throughout the world are practically unanimous in the view that the proper time to remove the appendix is immediately the diagnosis has been made.

I think it is very desirable that the public should be educated to appreciate the fact that a diagnosis of acute appendicitis invariably

calls for immediate operation; that no other form of treatment is of a curative character, and that delay is dangerous. Of course all we can do in the matter is to strongly advise operation. We cannot compel a patient to submit to operation, but in view of the great risk incurred by delay in such cases, it is most important that the public should be educated to appreciate the imperative necessity for immediate surgical treatment.

*Blood Examination.*—Within the last ten or twelve years much has been learnt in regard to the value of examination of the blood in acute surgical diseases, and it has been extensively employed as an aid in the diagnosis of obscure suppurations, and more especially in differential diagnosis. The results of experimental and clinical work indicate that investigation of the blood, and above all determination of the percentage of polymorphonuclear leucocytes, although not in itself sufficient to definitely establish a diagnosis, may, when considered in relation to the clinical symptoms, be an important factor in the differentiation of various acute surgical diseases.

In addition to the value of blood examination in diagnosis, the presence of marked leucocytosis often indicates a hopeful prognosis, but the most conclusive results are obtained, both in regard to diagnosis and prognosis, when the total and differential counts are taken together, and considered in relation to each other and the clinical findings. The total count may be regarded as an index of resistance of the body to the infective agent, whilst the differential count indicates the severity of the infection.

*Intravenous Anesthesia.*—Improvement in the methods of inducing anesthesia has been an important factor in advances in surgery, inasmuch as it now results in much less functional disturbance and interference with the manipulations of the surgeon. Instead of being obliged to rely upon one method only, as was formerly the case, we have now a choice of many methods of inducing anesthesia, and can select that which seems to be most suitable for the condition with which we are dealing.

In this connection I may refer to intra-spinal anesthesia, which has been practised extensively abroad, and to some extent also in this country. A few years ago Bier described the technique of intravenous local anesthesia, which has been found particularly useful in cases with pulmonary and cardiac complications. Bier injects novocain into the circulation, and under this method of anesthesia has performed various operations on the limbs, including resection of the elbow, resection of the knee-joint, and amputation of the lower part of the leg. He thinks there is not the slightest doubt that it is suitable for amputations of all kinds. More recently a method of intravenous general anesthesia has

been suggested by Burkhardt of Munich, which appears to be free from the many objections to inhalation anesthesia, and I believe has a great future in store for it.

At the present moment the safest all round anesthetic for general purposes is undoubtedly ether, given by the open method. I may say that for many years I have been in the habit of insisting upon the use of ether as an anesthetic, feeling that it is much safer than chloroform or chloroform in combination with ether. I would further like to emphasize the very great importance of having the ether administered by a skilled anesthetist.

*Brain Surgery.*—The most recent advance in the surgery of the brain consists in operation upon the hypophysis cerebri, which have been undertaken for the relief of acromegaly, and have in several cases resulted in retrogression of the symptoms.

*The Röntgen Rays.*—Röntgenology is now highly developed, and has become one of the most valuable adjuncts to surgical diagnosis. It has also greatly contributed to render surgery a more exact science, as it gives us a clearer understanding of the condition of many of the cases which come under our observation, and in many instances also gives indications for treatment.

In fractures the Röntgen rays are of the greatest possible service, as we are able to ascertain by means of a skiagram whether or not the fractured portions of bone are properly adjusted. It is also most useful in disease of the bones, as it is capable of showing the most minute alterations in structure.

Great advances have recently been made in Röntgenology, as applied to the diagnosis of disease of the alimentary canal, and it has greatly increased our knowledge of its physiology and pathology. In this region it is second only to an exploratory laparotomy, and by enabling the surgeon to make an early diagnosis renders it possible to operate at a much earlier and more favorable time. The radiographs are taken after the administration of bismuth subcarbonate, which obstructs the rays, and is considered the most suitable preparation.

By this method displacements of the stomach can be determined with a greater degree of accuracy than by any other means, with the exception of an exploratory laparotomy. The more recent methods of Röntgenology have rendered it possible to demonstrate the site of stenosis of the alimentary tract; to distinguish in some cases between functional and organic constriction; to observe the peristaltic action of drugs and the functioning of intestinal anastomoses; to determine the existence of visceroptoses and of diverticula. The X-rays have also been used in the diagnosis of pulmonary and other intra-thoracic conditions, and Rosenbaum reports a case in which a diagnosis of miliary



tuberculosis of the lungs was made, the skiagram showing numerous small tuberculous areas in both lungs.

Schurmayer emphasizes the value of Röntgenopalpation of the abdominal viscera, which is practically manipulation of the organs under the guidance of the eye, and he considers it to be especially useful in the diagnosis of pathological fixation of organs.

Although an X-ray examination is of the greatest assistance in diagnosis, it should not supersede the older methods of accurate clinical investigation, but should be used in combination with them.

As a therapeutic agent, however, the X-ray has been very disappointing, and has frequently been attended with harmful results. It has been successful in the treatment of certain superficial forms of carcinoma, but in these cases a quicker and more satisfactory result would as a rule be obtained by the use of the knife.

*Radium Treatment.*—The exact value of radium in the treatment of disease is at present complicated by the question of expense, and it is, of course, possible that in cases in which small doses fail larger doses would be successful.

Dr. Louis Wickham, who has had considerable experience with this mode of treatment at the Radium Institute at Paris, has recently reported his results. He is of opinion that in the case of malignant growths, which are difficult to remove, intense application of radium previous to operation is beneficial, and may facilitate removal of the growth.

It is sometimes useful in the treatment of superficial lesions, such as rodent ulcer and epithelioma, but I have recently seen a case of superficial epithelioma, in which it was positively injurious, and after six months' treatment it was necessary to remove the growth by operation. I have also seen cases of rodent ulcer which were in no way benefited by radium treatment, and required subsequent surgical removal.

It is of undoubted value in the treatment of certain vascular lesions, such as nævi, port wine stain, etc. Wickham considers it also of value in surgical tuberculosis and other skin lesions.

My feeling about it in malignant disease is that it should never be used where an operation is possible, but after the growth has been removed there can be no objection to its use for a time, in the hope that it may prevent recurrence.

That it should be used as a cure for cancer is an unfortunate mistake, and has brought radium into disrepute in many quarters. It is a great pity that the opinion has got about that radium will cure cancer, or that anyone should employ radium for the treatment of malignant disease where surgery is possible. I have met with a number of instances in which a great deal of valuable time has been wasted

in the use of radium, the delay meaning that the growth was becoming inoperable.

In addition to the therapeutic use of radium, small doses of it have been found to stimulate the healing of wounds.

*Thoracic Surgery.*—In 1908 Sauerbruch devised a cabinet which rendered it possible to open the thorax freely, whilst respiration was kept up under the influence of either positive or negative pressure. This led in great advances in thoracic surgery, and many intrathoracic conditions can now be dealt with in a way that was impossible a few years ago. Dr. Willy Meyer subsequently constructed a cabinet which was an improvement on Sauerbruch's apparatus, in that pressure could be changed from positive to negative at the will of the operator, or both kinds of pressure could be used simultaneously. He describes this cabinet as the "universal pressure chamber."

In 1909 Meltzer and Auer suggested a new method of artificial respiration under positive pressure, which they called intratracheal insufflation, and the very satisfactory results in curarised dogs led to its employment for intra-thoracic operations in man. Subsequent experience has shown that in the Meltzer-Auer method we have a simple and apparently safe method of producing intra-pulmonary pressure, permitting of open operations upon the pleura and other intra-thoracic structures without the use of any cumbersome apparatus, and that, owing to these advantages, it is likely to supersede all the more complicated pressure cabinets.

Dr. Elsberg has anesthetized about two hundred patients in this way at the Mount Sinai Hospital, New York, and states that the results are extremely satisfactory. The operations in which he has employed it include craniotomy, thyroidectomy, thoracic empyema, removal of tuberculous cervical glands, pulmonary operations, etc.

Operations upon the heart represent a comparatively new field of surgery, although an attempt was made by Farina in 1896 to suture a wound of the heart. In 1909, Vaughan collected 150 cases of suture of the heart, with 35 per cent. cures. Eugene H. Pool collected 77 cases, operated upon between 1909 and 1911, with 55 per cent. recoveries and 45 per cent. deaths. The use of differential pressure methods has greatly improved the prognosis in these cases, and recent literature on that subject indicates that the heart can be manipulated and treated surgically in the same way as any other organ in the body.

Amongst the most important contributions to the surgery of the heart and blood-vessels is the work of Professor Carrel, which was commenced in 1902 at the University of Lyons, France; continued at Chicago, and more recently carried on at the Rockefeller Institute, New York. He uses the Meltzer-Auer method of insufflation anesthesia, and

as you will hear from his lecture this evening, has been able to perform successful circular suture of arteries or veins, arterio-venous anastomosis, transplantation of segments of veins into arteries, patching of arteries with pieces taken either from veins or the peritoneum, the reversal of circulation in the thyroid, transplation of the kidney from one side to the other in the same animal or to another animal of the same species, and more recently the transplantation of entire limbs. The results of his experimental researches indicate that we may in future be able to cure many diseases of the heart and blood-vessels by means of surgical procedures.

*Förster's Operation.*—Surgery has again come to the relief of what has hitherto been regarded as a purely medical condition, namely, *tabes dorsalis*, and resection of the posterior spinal roots has been performed for the relief of the gastric crises met with in this disease.

The *rationale* of the operation is based on the assumption that in the various crises which occur in the course of locomotor ataxia, affecting the stomach, intestines, bladder or larynx, there are invariably three cardinal signs, namely, symptoms of motor, sensory and secretory irritation of the organ involved. In Förster's opinion sensory irritation is the primary condition, the other two being secondary. Förster and Küttner operated on a patient suffering from *tabes*, the seventh to the tenth thoracic roots inclusive being divided. Pain and vomiting subsided, the appetite improved, and the patient gained in weight.

It has also been recommended for the spasticity which obtains in cerebral diplegia, and which is due to loss of inhibition from the higher centres, but far better results have been obtained in the lower than in the higher extremity. The immediate results are great diminution in or disappearance of the spasticity, and of spontaneous contractures and cramp, if present.

*Osteoplastic Surgery.*—During the last few years osteoplastic and cosmetic surgery has undergone remarkable development, and bone transplantation has recently been extensively employed in the correction of congenital defects and in replacement of bone which has been destroyed or removed by injuries or destructive diseases of various kinds.

Some surgeons, including Lexer, Enderlen and Königsberg, have successfully transplanted entire joints. Lexer reports four functionally successful cases, in which portions of bone and adjacent joints were replaced by bone and cartilage. In two cases of synostosis of the knee, due respectively to suppuration and tuberculosis, the entire knee was resected, and a new knee-joint, with a portion of the shaft of the tibia, implanted. These patients, four and seven months after the operation, experienced no pain on standing or walking, and could use the knee to a slight extent, passive movement to an angle of 45 degrees being possible

in one case. Lexer usually procures his material from limbs amputated for senile gangrene.

In a more recent publication Lexer reports several cases in which he has transplanted bone for cosmetic purposes, including formation of a nose or ear, correction of defects after operation for cancer of the face, transplantation of a portion of the scalp to supply a moustache or beard, and of a wedge of bone from the tibia to form a frame for the nose.

Kirschner has had excellent results from transplantation of fascia from the iliotibial band of the fascia lata. He has used it chiefly to wrap around vessels or organs after suture, to close defects and reinforce hernia operations, to interpose between organs which have grown together, to make a sling for suspension of a displaced kidney or other organ, and for closing gaps in the dura. He also thinks it suitable as a substitute for tendons.

In the treatment of paralytic deformities of the extremities bone transplantation has been largely superseded by periosteal implantation of normal tendons, which is based upon the fact that normal muscle tendons will continue to functionate normally, even if the muscles pull in an altered direction. Lange of Munich arrived at the conclusion that it is inadvisable to impair and possibly sacrifice normally functioning tendons when the result is problematical, and therefore devised the method of implantation of silk, the results of which are the best that have been attained up to the present.

*Alcohol Injections in Trigeminal Neuralgia.*—From time to time many experiments have been made with the object of relieving the pain of trigeminal neuralgia and preventing its recurrence, these experiments consisting chiefly of the injection of chemical solutions and fluids of various kinds into or around the affected nerves. The procedure which has, up to the present, had the most satisfactory results is that of deep injections of a solution of alcohol into the trunk or trunks of the nerves involved. If the injection is skilfully performed, and the needle punctures the nerve sheath, the alcohol instantly paralyses the nerve at the point of injection, and destroys its fibres. Resection of the Gasserian ganglion, which is an exceedingly severe operation, is, however, the only effectual means of obtaining a permanent cure, but the alcohol injections may relieve the pain for a period of from six months to two or three years, and the great advantage of the procedure is the possibility of repeating the injections indefinitely at short intervals if the pain returns.

*Ehrlich's Salvarsan.*—The last three or four decades have been a period of extraordinary development in regard to the science of

applied bacteriology, and more especially with reference to its value in the diagnosis and prognosis of infective diseases.

Syphilis is one of the diseases to which attention has been directed in this connection, and the recent advances in its treatment date from the researches of Professor Metchnikoff, who in 1903 succeeded in transmitting the disease to apes by inoculation, and thus proved that it was due to a specific infection. Further investigation along these lines led to the discovery in 1905 of the spirocheta pallida as the infective agent, and to that of the Wassermann serum reaction in 1906.

Early in 1910 Ehrlich made the assertion that the chemical compound dioxy-diamino-arseno-benzol, to which he gave the name of "606," is capable of producing "sterilization of the system." After making a large number of experiments in animals, Ehrlich sent samples of the drug to physicians in different parts of the world, in order that they might make a trial of its efficacy in the treatment of human syphilis. The immediate results were brilliant, but the intramuscular injections, which were at first used, had the great drawback of causing extreme pain and disability, and this method has been discarded.

Since this time the preparation has been greatly improved, chiefly in the direction of solubility, and it has successively become "606 ideal," "606 hyperideal," and lastly "Salvarsan."

Ehrlich subsequently recommended that the drug should be administered intravenously in small doses, and in some cases in combination with mercury. Many writers, including Sir Malcolm Morris, employ this combined form of treatment, and are of opinion that until time has shown that the effects of salvarsan are permanent this is the more prudent course.

Although Ehrlich's idea that the drug would be capable of destroying every spirochete in the body has not been completely realized, and although it is no longer considered to be an infallible specific which is indicated in every case of syphilis, there is no doubt that it is the most powerful antisiphilitic remedy which we possess at the present time. It was at first feared that the administration of salvarsan might result in injury to the optic nerve, but Ehrlich states that he has not heard of a single case of blindness in connection with it, and Wechselmann, who has used it in over 1,200 cases, has not observed injury to the nerve in any one of them. A few cases have recently been reported, however, in which injury to the optic nerve was assumed to be due to this cause.

*Etiology and Treatment of Cancer.*—During the last few years extensive investigations have been undertaken by various scientists, including those carried out by the Cancer Research Commission in London, England, and at the Rockefeller Institute, New York, but up to

the present no definite conclusion has been arrived at with regard to the etiology of cancer.

In this connection I should like to refer to the very valuable work in regard to cancer which has recently been done by Sir Henry Butlin, the great surgeon and pathologist, who died at London, England, on February 24th of this year. He had devoted special attention to diseases of the throat and tongue, and—strange to say—he died of cancer affecting the larynx.

At the last annual meeting of the Cancer Research Commission, held in London in July of last year, the Secretary, Dr. Bashford, stated that it has now been proved beyond the possibility of doubt that cancer—to begin with—is a local and not a constitutional disease. This fact contributes to render prognosis comparatively favorable, provided operation can be undertaken at an early stage, whilst the disease remains circumscribed. Precise evidence has also been secured in regard to the existence of hereditary predisposition to spontaneous cancer. Its wide distribution throughout the entire human race and the vertebrates, even when living in a state of nature, and the fact that the only way in which it can be transmitted from one individual to another of the same species is by the implantation of living cancer, proves, according almost invariable success of reimplantation into an animal of a portion of its own spontaneous tumor, and the almost invariable failure of implantation of any spontaneous tumor into other spontaneously affected animals, lead him to the conclusion that each tumor is individual, and genetically related to the particular organism in which it originates.

In his Hunterian Lectures, delivered at the Royal College of Surgeons, London, England, about a year ago, the late Sir Henry Butlin brought forward a theory of the intrinsic, as opposed to extrinsic, origin of cancer. According to this theory, each cell in the human body is regarded as equivalent to an entire individual amongst the protozoa or other unicellular organisms, and the cancer parasite is taken to be in effect simply the cancer cell, which by a process of atavism has reverted more or less to the condition of the original protozoa, and has become in its relation to the normal cells in the body the equivalent of an intruding protozan parasite. This cancer cell, to which he gives the name of *unicellula cancri*, is considered to be a completely independent organism, which has not entered the body from without, but has been generated within it, and which, instead of acting in harmony with the normal cells, acts in opposition to them, and thus produces anarchy and destruction.

Two objections have been made to this view, namely, that in the first place the cancer cell, so far as we know, undergoes no process analogous to that of fertilization, and that in the second place it is

apparently incapable of growth apart from the organism in which it has primarily developed.

As regards the second of these objections, Dr. Peyton Rous, of the Rockefeller Institute, New York, has produced malignant sarcoma in fowls by the subcutaneous injection of the filtrate of a similar growth obtained from a bird of the same species. Professor Alexis Carrel and Dr. Burrows, also of the Rockefeller Institute, report a still more conclusive experiment, in so far as the human subject is concerned, in that they have made a successful culture from a sarcoma removed by operation from a female patient, although in this instance growth was less luxuriant than that of the fowl sarcoma.

Sir Jonathan Hutchinson states that his experience indicates that the administration of arsenic, even if only for a short period, may result in predisposition to cancer, more especially epithelioma, and he thinks that it is probably also responsible for some cases of endothelioma and sarcoma. He suggests that the drug may act as a depressant to growth, and thus allow the appearance, after a short interval, of degenerate forms of growth nearly allied to those of vegetation.

From time to time a large number of remedies have been suggested for the treatment of cancer, and some of them have been used with a certain amount of success. Several writers report cases in which they have employed serum prepared from cancerous material. Berkeley and Beebe find that autogenous is more effective than stock serum, and think that this mode of treatment may be serviceable in the prevention of recurrence of malignant tumors after operation.

Dr. Coley, of New York, claims to have cured a few cases of sarcoma of the femur by injection of the fluid which bears his name. Sir Henry Butlin states that the Continental and English surgeons have not been equally successful in the use of this fluid, and although we have used Coley's fluid here a number of times, we have never seen a case in which it has been of value.

Acting upon the suggestion of Professor Ehrlich that the cancer cell might possibly be influenced by a specific drug, Wassermann and others have found that a compound of eosin and selenium, injected intravenously into mice with malignant tumors, causes marked softening of the tumor after three injections; after four injections absorption of its liquefied contents, and in favorable cases its complete disappearance in about ten days. In the case of exceptionally large tumors, which tend to soften rapidly, the animals frequently succumb to the action of the toxic material absorbed from the tumors. Autopsy indicates that the preparation has been deposited electively in the tumor, indicating its affinity for the cancer cells. It apparently has a destructive action upon the nuclei of these cells, whilst it does not affect the

normal cells. In animals which have been kept under observation for months after disappearance of the tumors no recurrence has been noted, but if a tumor is only partially destroyed recurrence is rapid.

In the Report of the Cancer Research Commission, previously referred to, Dr. Bashford emphasizes the fact that nothing but harm can arise from the premature application to the treatment of human cancer of methods which have been found effective in modifying inoculation cancer in animals. A method which produced active immunity in inoculated cancer was tested in thirty-three mice with natural cancer. It resulted in no arrest of growth or dissemination, and did not prevent recurrence of spontaneous cancer after operation.

During the last thirty years or so there has been marvellous improvement in the results of operations for cancer, and extensive and early operation, with removal, as far as possible, of all the cancer cells in the body has been attended with great success. In view of the fact that most of the writers on the subject agree in considering individual resistance an important factor, if not the chief factor, in the cure of cancer, it is obvious that even when the disease is sufficiently advanced to be no longer localized, and cancer cells have already migrated, it is highly desirable to remove the chief source of supply of these cancer cells, and thus assist the defences of the organism in their endeavors to re-establish normal physiological conditions.

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## SOME ASPECTS OF NEUROLOGY TO GENERAL PRACTICE.\*

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BY WILLIAM ALDREN TURNER, M.D., OF LONDON.

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*MR. President and Gentlemen*.—My first duty, a most agreeable one, is to express to you, sir, my cordial thanks for the invitation which you have given me to deliver the address in medicine before the Ontario Medical Association at its thirty-second Annual Meeting.

In selecting a subject on which to address you, it has seemed to me that some of the aspects of Neurology to general practice would not be considered out of place. This choice has in consequence permitted me, among other matters, to make a few remarks upon psycho-therapeutics, a subject which is claiming much attention at the present time, especially on this side.

*Dr. Hughlings Jackson*.—I cannot, however, pass to the subject of my address without paying my tribute to the loss which clinical

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medicine, and more especially that branch of it which claims my attention, namely, the Diseases of the Nervous System, has sustained in the death of Dr. Hughlings Jackson, which took place last autumn.

He was the father of British Neurology, and all those whose activities are devoted towards this subject, whether as physiologists, pathologists or practitioners, claim him as their Master. His influence with his colleagues and upon his pupils was great, but his studious nature and retiring habits rendered him little known in the public life of the profession in London.

He possessed a rare combination of mental qualities, keen clinical instinct with a strong philosophic bent. His teaching illumined many dark places and obscure corners of the Nervous System, and his original views upon the "levels" into which he theoretically divided that System, did much to clarify the study of its diseases. His name will long be perpetuated in that variety of localised convulsion which he described, and which is known as Jacksonian Epilepsy.

*The Clinical Laboratory.*—When a comparison is made between the practice of twelve or fifteen years ago and that of to-day, the most striking feature of difference will be found in the assistance which various auxiliary methods, more especially the clinical laboratory and the Röntgen Rays, have rendered to both the diagnosis and the treatment of disease.

The introduction of laboratory methods upon modern lines may be said to date from the investigations of Pasteur upon rabies and Koch upon the tubercle bacillus, and more particularly from the introduction by the latter of tuberculin injections.

It is only, however, within comparatively recent years that these methods have been so developed and extended as to form almost a separate department of practical medicine. So extensive, indeed, has been their application and so efficacious the uses of the laboratory in clinical work, that a new class of highly-trained and specialized practitioners has been solved.

There are many who think that clinical medicine is becoming too dependent upon the observations made in the laboratory, and that the old time method of studying the patient as the soil in which disease takes root and growth, is being to often replaced by examination upon disease in test-tubes. It will, I think, be generally admitted that the laboratory investigation is in many cases a most useful aid to the bedside examination, but should never be allowed to replace it.

In my own branch of clinical medicine, much useful information may be obtained with the co-operation of the clinical pathologist, but there are very few organic diseases of the nervous system, even in the early stages, a diagnosis of which cannot be made by a careful

bedside examination along well-recognized lines. The readiness and completeness with which an opinion may be formed from an investigation of the cerebrospinal fluid, should not be allowed to replace, but only augment, the usual bedside observations. But, notwithstanding, there are many morbid conditions in which such an examination is desirable, and even essential to complete the diagnosis.

*Lumbar Puncture*, by means of which the cerebro-spinal fluid is obtained, was introduced originally by Quinke in 1891. In the early days following its introduction, the cerebrospinal fluid was examined with a view more especially to the differential diagnosis of the various forms of acute meningitis, and it still finds one of its most helpful applications in these diseases.

By its cellular and bacterial elements of the fluid are examined and valuable information is obtained as to the precise form of meningitis and the nature of the infective agent.

In cerebro-spinal meningitis, Weichselbaum demonstrated the meningo-coccus in connection with a large polymorpho-nuclear increase. In tuberculous meningitis Widal and others showed that mono-nuclear lymphocytes predominate, while in the purulent forms of acute meningitis the polymorpho-nuclear cells are increased, and cultivation reveals the presence of staphylo, strepto and pneumococci.

The presence, however, of polymorpho-nuclear cells should not be regarded as proving the existence of suppurative meningitis, as they may be found in brain abscess, suppurative labyrinthitis and sinus phlebitis, without any direct implication of the cerebral membranes.

The bacteriological examination of the fluid also is far-reaching, for the absence of bacilli in serious meningitis, cerebral tumor and hydrocephalus would serve to distinguish these conditions from meningitis, notwithstanding the similarity of symptoms in some cases.

At a later date the investigations of Widal, Sicard and others of the French school, demonstrated the almost constant increase of the lymphocytes in certain chronic degenerative diseases of syphilitic origin, such as paralytic dementia and tabes dorsalis. According to Nouné, a marked lymphocytosis is present in 100 per cent. of the former and 90 per cent. of the latter.

The constant increase of the lymphocyte count in these diseases, even in the early stages, was used as a means of diagnosis, when the usual clinical symptoms were not obtrusive. I have seen a few cases in which such an examination was necessary to establish a diagnosis, but in the majority, even in an early stage, some clinical signs will be found if carefully looked for.

The association of a slight increase in the lymphocyte count along with Argyll-Robertson pupils, (or loss of the pupillary light reaction),

in a case presenting neurasthenic or other symptoms of nervous breakdown, but without definite physical signs of *tabes dorsalis*, would scarcely be sufficient ground on which to base a diagnosis of this disease. This combination of symptoms is not uncommon, and considerable difficulty may be experienced in forming a differential diagnosis as to whether the case in question is of a functional or organic character.

Since the introduction of the Wassermann test, a further reaction of importance has been added to diagnosis; but there are some physicians who rely upon cyto-diagnosis as of equal value in the differentiation of these cases.

It should, however, be mentioned that a lymphocytosis has been found in certain diseases of a non-specific character such as herpes zoster, Landry's paralysis and enteric fever.

The observation of Mott and Haliburton that cholin was present in the cerebro-spinal fluid in organic diseases was at one time regarded as a possible means of establishing a diagnosis between organic and functional disorders of the nervous system. As this observation has not assumed sufficient pathological importance, and as the technique is complicated and difficult, the method has been abandoned as a diagnostic resource.

Recently the examination of the cerebro-spinal fluid for the Wassermann reaction has been undertaken, especially in the early stages of those diseases in which a specific causation is probable, and when the usual physical signs are either not present or only to an uncertain or equivocal extent.

Most practitioners see from time to time cases having a definite neurological or mental aspect, in which it is difficult to say from the physical signs alone, such as Argyll-Robertson pupils and alterations in the reflexes, whether the symptoms are functional and temporary, or indicate the onset of serious organic disease.

The cases to which reference is made are usually of adult age and commonly of the male sex. They may show signs of neurasthenic breakdown, some degree of mental depression or excitement, or acute insomnia for which no obvious cause is apparent. On the other hand, persistent headache, progressive loss of memory, epilepsy, and eclamptic convulsions or symptoms of arterio-sclerosis may be the outstanding features.

In this type of case, the examination of the blood and cerebrospinal fluid by the Wassermann test is regarded as being of great diagnostic value, and as throwing much light upon the underlying structural changes. It is also a means of differentiating between functional and organic nervous conditions, occurring in syphilitic subjects.

The existence of a positive Wassermann reaction of the blood serum in the type of case just described would be an indication merely of the

constitutional state, but would not throw any light upon the condition of the central nervous system.

If, however, a positive Wassermann reaction was found in the cerebro-spinal fluid as well, and if with this there was associated a large increase in the lymphocyte count, a diagnosis of parasyphilitic disease, most likely general paralysis, might with confidence be made.

There is also evidence that the reaction of the blood serum may be negative while that of the cerebro-spinal fluid may be positive in these cases. There are also cases in which the lymphocyte count is above the normal, but does not reach the high number found in general paralysis. This latter type is usually associated with a positive cerebro-spinal reaction. The significance of this type is less certain, but it probably point to a chronic inflammatory condition of the central nervous system.

The proportion of cases of tabes dorsalis which show a positive Wasserman reaction of the cerebro-spinal fluid varies from 5 to 10 per cent. according to Nouné up to about 50 per cent. in Mott's experience.

The examination therefore of the cerebro-spinal fluid by the Wassermann test, has come to be of immense practical value in the differential diagnosis of functional and organic nervous conditions, occurring in syphilitic subjects. Many cases occur, however, in which such an examination is necessary; it should, in fact, be reserved for cases in an early or equivocal stage, or for those in which the physical signs are not sufficiently characteristic.

Lumbar puncture has also been adopted as a therapeutic means, but its application for this purpose is limited and has been confined mainly to cerebro-spinal meningitis. The removal of a quantity of fluid is an operation not unattended by danger, and in disorders characterized by an increase of the intracranial pressure, such as cerebellar tumors, the risk would seem to be great. Removal of some fluid, however, is often of advantage in the coma of a cerebral hemorrhage, and in hydrocephalus. Lumbar puncture is also used to assist the effects of operation upon meningitis secondary to ear disease, when it acts as a temporary drainage for the removal of inflammatory products.

*Serotherapy.* The diseases of the nervous system do not lend themselves, so far as their study has yet gone, to treatment by serums and vaccines. There are, however, two maladies—cerebro-spinal fever and acute poliomyelitis—whose symptoms indicate nervous derangement, but whose pathology places them under the acute infectious disorders.

The infection of the central nervous system through the posterior nares and naso-pharynx, the probable similarity of the infective agent in both diseases, and the fact that they are known to occur in epidemic

and sporadic forms, have opened the way for a better study and has led to the view that they are probably of the same or similar pathogenic nature.

The artificial production of poliomyelitis in monkeys by Flexner and others has thrown fresh light upon its pathogeny, but attempts to prevent or cure it after experimental production by means of serum or vaccines have not been encouraging.

For cerebro-spinal meningitis, on the other hand, a number of serums have been prepared and their administration during the early days of the fever would appear to be of service.

Flexner states that he has largely reduced the mortality by the use of his serum.

It is difficult to make any authentic statement upon the use of serum and vaccines in the meningitides secondary to ear disease. Their employment, however, would appear to be of some value as an auxiliary method in operative treatment. An autogenous vaccine ought to be prepared and employed in all these cases, although its direct influence cannot at present be estimated.

The Röntgen Rays find little application for their use in diseases of the nervous system. It was at one time thought that they might be of value in the location of tumors within the cranial cavity. This has not been found of any real value. They are, however, of decided value in the diagnosis of morbid conditions of the bony tissues, surrounding the central nervous system, especially with reference to pituitary and other lesions at the base of the skull.

A minor, but at the same time interesting observation, has been made from their universal application in all cases of muscular atrophy affecting the small muscles of the hands. It has been found by X-ray photographs of the neck in many of these cases, occurring especially in young women, how frequently the presence of an additional or cervical rib is the cause of the muscular atrophy, and how satisfactory the recovery may be after the removal of the accessory piece of bone.

In cases of neurasthenia, accompanied by gastro and enteroptosis, the examination of the size, shape, position and motor action of the stomach and intestines may be easily and satisfactorily determined by tracing the course of a bismuth meal through the digestive tract by X-ray examination.

Too much importance cannot be given to this method of examining a portion of the body whose functions have so far not been open to a closer examination than could be obtained through abdominal palpation.

*The Bromides in the Treatment of Epilepsy.*—There exists a strong feeling in the popular mind that the prolonged use of the bromides in the treatment of epilepsy is not only useless, but actually harmful. One

might even say that this feeling to some extent has taken hold of the medical mind. There is, in fact, in some quarters a reaction against the administration of bromides in the treatment of this disease.

There is no doubt that since the introduction of the bromides in 1857 in the treatment of epilepsy, most epileptics at some period in the course of their malady have been treated by these drugs. The almost universal prescribing of the bromides during the past half century with more or less success, has to a large extent deprived such patients of the advantages which certainly may be obtained from hygienic, dietetic and disciplinary lines of treatment.

The decision as to whether a particular case of epilepsy has been cured in the proper sense of that term is difficult to determine, as it is well known that attacks may recur even after an interval of 20 or more years. But it may be conceded that arrests of fits for a period of from 5 to 10 years in a case which presents no mental stigmata and in which all treatment has been suspended may be deemed as cured.

It is just this difficulty in defining a cure, which renders the discussion of the problem of the value of bromides so difficult. In the pre-bromide days, that is before the year 1857, quite a number of cases of epilepsy were recorded by the French and English physicians as cured, the percentage varying from 5 to 13 per cent. These are the results recorded by physicians who used remedies such as oxide of zinc, nitrate of silver, and belladonna, some of which have largely passed out of common use.

On the other hand, the statistics of those who have treated epilepsy with the bromides do not differ materially from those just mentioned. Since the introduction of the bromides the statistics of cured cases also vary from 4 or 5 to 12 per cent. Medical writers, therefore, such as Pierce Clark of New York, and others, who favor the abolition of sedative drugs in the treatment of this disease, find in the above quoted figures strong basis for their contention, that the bromides are neither necessary nor desirable adjuvants to ordinary hygienic remedies.

It is therefore a matter of importance to ascertain whether any real basis exists for the feeling against the use of the bromides, or whether this view is only another instance of popular misconception, of which there are several examples in this disease.

My experience of the treatment of epilepsy extends over some 16 or 18 years, during which time I have prescribed for several thousands of epileptics in all stages and varieties of the malady.

I can without hesitation say that the influence of the bromides upon epileptic fits is both variable and uncertain. In a certain proportion of cases, amounting to about 25 per cent. so much benefit is derived that the attacks are either permanently or temporarily arrested. It is prob-

able that the spontaneously curable cases of the disease are found in this group, cases which in the view of some writers are arrested not in consequence of, but in spite of the remedy. The curable types of epilepsy are recognizable early in the disease, and in them I consider early and persistent uses of small doses of the bromides most essential.

In a second group of cases, amounting to a further 25 per cent. some improvement is derived from the administration of the bromides, mainly in the direction of lessening the frequency and severity of the fits. This may be looked upon as the common temporary result of bromide treatment, and is what may with confidence be expected in many cases in the early stages of the disease.

In the remaining group, amounting to about 50 per cent. the bromides either have no influence at all upon the fits or are actually deleterious.

It is therefore obvious that about half the number of epileptics derive no benefit from the administration of the bromides, from which it might be argued that these salts are of little, if indeed any, use in the treatment of epilepsy. On the other hand, there is the 25-50 per cent. which derive great benefit from these drugs, including the 10 or 12 per cent. which are cured.

It is within the experience of most physicians, especially of those working amongst the hospital class, that no complete record can be obtained either of the number arrested or the duration of the arrest, as there is a tendency for the patient to cease attendance once he is relieved of his symptoms.

I hold that it is an error to say that the bromides are of no use in the treatment of epilepsy. If 50 per cent. of the cases derive some benefit from the administration of these drugs, then all cases of recent origin should be given the benefit of the remedy for a time.

I should, however, be the last person to neglect the value of diet, occupation, and general mental and physical hygiene in the sufferer from the disease. By these means the dose of the salt is kept at a minimum which will produce the desired effect; and the most successful and satisfactory cases of this malady are those in which a combination of sedative remedy, diet and general hygiene are prescribed and administered under the care of a nurse, attendant or other person, who will enter into every detail of the case and its treatment, both in the letter and in the spirit.

A few remarks upon some popular fallacies in connection with epilepsy may not be out of place.

In the first instance, as to "growing out" of fits. It has long been a popular idea that an epileptic on reaching a certain age or after a certain number of years of the disease, may outgrow his attacks.

The age is variously stated, but twenty-one is frequently mentioned by the parents as being the one given by the doctor.

There are two age-periods when "growing out" may be looked for. The first is the period of childhood between 4 or 5 and 7 or 8 years in those whose fits commence in infancy. In addition to being a period when fits may with some certainty be expected to cease, at all events for a time, it is also an epoch during which the onset of epilepsy is relatively uncommon.

The second is between the ages of 21 and 25 or 26 (adolescence) in those whose fits have commenced during puberty. I have elsewhere shown that the quinquennial period, 21 to 25 years of age, is that one which seems most favorable for the arrest of epilepsy in those whose fits commenced between 15 and 20. This bears out a further observation that epileptic fits are more prone to arrest during the first three to five years following their onset. If therefore there is another period in which a patient may "outgrow" his fits, it is between the ages of 21 and 25 or 26, in those cases in which the disease has commenced during puberty.

There is no evidence that the climacteric period has any influence upon the arrest of epilepsy, except perhaps in a few isolated cases.

Secondly, as to the influence of the catamenia. The popular belief that the satisfactory and regular establishment of the menstrual functions will arrest the disease has no scientific basis. The onset of fits in girls is commonly accompanied by irregularity in the period, but it is rare to find any amelioration when the periods become regularly established. Physiological amenorrhœa may or may not have a beneficial effect.

Thirdly, as to marriage. There would appear to be no real foundation for the widespread belief, mainly held by the less educated section of the community, that the marriage of an epileptic girl, especially if pregnancy results, favors the cure of the disease. On the contrary, although isolated instances of such a cure occur, the consequences of matrimony tend to the production of circumstances distinctly unfavorable to the arrest of the disease. That there is no certainty in the influence of marriage upon epilepsy, is the result of the observations of most writers on this subject.

The influence, however, upon the individual is relatively small as compared with that upon the offspring, and the consequent transmission of the disease. In definitely hereditary cases it is probable that one or more children out of several will become epileptic; there is no certainty that any of the offspring will suffer, although it is unlikely that all will escape.

*Mind and Body—Hysteria.*—It has been the custom in the teaching of the schools largely to disregard the mental side of disease, and to



consider as altogether a special study symptoms and diseases based upon a psychical foundation.

Perhaps, under existing arrangements, such a disassociation is necessary, but the close inter-relation between mental and physical symptoms is all-pervading, and there will be an advance in clinical teaching when this aspect is more decidedly brought before the attention of students during their hospital career.

In the first place, there is no physical disorder, however slight, which does not produce some effect upon the mind, though varying in degree according to the temperament. Every practitioner is aware how much the course and treatment of an acute inflammatory or other malady depends upon the mental attitude of the patient, according as he regards his condition from a hopeful or a pessimistic aspect.

There are many persons who consider that the onset of some unpleasant or unaccustomed sensation in any part of the body signifies the development of a serious disease, a form of spurious hypochondriasis, which only requires the *ipse dixit* of their physician to dispel. But a type of case is occasionally met with, in which the commencement of a grave and incurable malady may be preceded or accompanied by fears in the patient's mind that such a calamity is in store for him. It is in fact a presentiment of actual physical disorder, and sometimes of dissolution.

Then there is the genuine hypochondriasis, a morbid fear of disease affecting one's body, which is a mental disease *sui generis*. It may develop, as Freund has explained, out of an anxiety neurosis, or a more permanent state of hypochondriasis may issue out of a temporary neurasthenia or physical breakdown.

Further, we recognize the influence of nervous and physical emotions in the causation of physical symptoms. According as an emotion is pleasureable or painful, we find respectively increase of the heart's action, increased muscular energy and a sense of well being, or inhibition of the gastro-intestinal functions, a keen sense of fatigue and a decrease of muscular energy.

The effect of an emotional influence upon the physical condition has been ingeniously shown by the experimental researches of Pawlow on the salivary secretion of dogs.

In the course of his experiments it appeared that all the phenomena which were seen in the salivary glands under physiological conditions reappeared in exactly the same manner under the influence of psychological conditions. Thus when he pretended to throw pebbles into the dog's mouth or to cast in sand, or to pour in something disagreeable, or when it was offered this or that kind of food, a secretion either immediately appeared or it did not appear, in accordance with the properties

of the substance which he had previously seen to regulate the quantity and nature of the juice when physiologically excited to flow. If he pretended to throw in sand a watery saliva escaped from the mucuous glands; if food, a slimy saliva; if the food were dry, a large quantity of saliva flowed out, even when it excited no special interest on the part of the dog. When a moist food was presented, less saliva appeared, however eagerly the dog may have desired the food.

When this subject is viewed more especially from the clinico-neurological standpoint, it becomes evident that many depressive states, characterized by hesitations, doubts, scruples, anxiety apprehensions and morbid fears, are associated with derangements of the bodily functions, such as dryness of the mouth, furring of the tongue, flatulence, constipation, and the like.

Owing to the lessened vascular tone of the emotional depressive states, the body also is more prone to physical disorder and more ready to receive the encroachments of infective organisms.

Mental influences may so modify the appearance of disease that a wrong impression sometimes may be conveyed to the physician's mind. Most of us may recall occasions when it has seemed as if a fatal termination were imminent, when in reality the gravity of the situation was dependent upon a depressive mental state rather than upon true physical weakness.

How far the persistence of emotional and mental influences when continued for many years may predispose to organic disease by permanently impairing the secretions, and altering the vascular tone, is a subject less clearly defined.

Probably the most characteristic effect of an acute emotional shock, acting upon the mind of a person predisposed to such influences, is the production of those physical and mental symptoms, paroxysmal or paralytic, which go towards the make-up of a case of Acute Hysteria.

*Hysteria* is a disease which has excited interest and curiosity throughout all time. Its nature and causation were as much a source of speculation to the ancients as to ourselves. As its name implies the disease was supposed to originate in the womb. As a later development, this idea was supplanted by the view that the sexual organs in general were concerned in the production of hysterical phenomena. The most recent hypothesis, enunciated only during the last few years, again places the causation of hysteria in sexual disturbances, but based in this case upon a psychical and not a physical foundation.

Our modern conceptions of hysteria, however, are mainly founded upon the observations and writings of Briquet, Charcot, and the Salpetriere School. It was recognized by them that hysteria was no privilege of the female sex, but that its origin had to be sought for in dis-

turbances of the physical functions of the brain. Charcot expressed his strong belief in the psychological nature of hysteria, and demonstrated the possibility of reproducing hysterical symptoms by hypnotic suggestion and of effecting their disappearance by a similar means.

Since his time the psychological side of hysteria has been greatly developed, and this aspect of the subject is the one which now commands the most respect.

The theories of "Nervous Mimicry" (Paget) or of "Paralysis from Idea" (Reynolds) have been displaced, and replaced, by the broader view of the subconscious mind and of the dissociation of the personality.

I shall now refer very briefly to the three chief theories of hysteria, which at the present time attract most attention. They all view the malady from the psychological side, two of them make use of the theory of the subconscious mind, (Janet, Freud) and the third emphasizes the cardinal importance of Suggestion (Babinski).

Let us look first at the theory of Janet, the distinguished psychologist of the College de France. His theory is based on the view that just as a normal person sees objects in the peripheral portions of his field of vision, as well as in the centre, so the normal mind can take in and arrange sensations, memories, ideas and emotions, the comprehensiveness of his perception being the field of normal consciousness.

Janet's definition of hysteria implies a retraction or limitation of this field of personal consciousness, and a tendency to the dissociation and emancipation of the systems of ideas and functions that constitute personality. In other words, "in proportion as the field of personal consciousness diminishes, so do the subconscious mental condition tend to flourish and abound." (Ormerod.)

By this means Janet explains most of the characteristic symptoms of hysteria. "The crisis or fits of hysteria are somnambulistic states in which the patient lives some scene over again, goes through some action, or gives himself over to some idea and obeys it to the exclusion of all others. He is in a dream, living for the moment in a small world of his own. All this is forgotten when the attack is over, and he returns to normal consciousness." (Wilson.)

Such is the explanation of those cases of hysterical fugue or lapse of memory which are met with from time to time. It would also appear to offer an explanation of the classical hysterical fit which is more commonly seen amongst the Latin peoples, a fit characterized by much display of pantomime and histrionic effort. On the other hand, as suggested by Ormerod, it hardly offers a sufficient explanation of the simple hysterical fit or "attack of hysterics" which forms the common type of the seizure in our patients.

The same idea may be traced in the motor and sensory symptoms—

the paralyses and the anæsthesias. In the former, the memory, the idea or the function of movement, may be lost, in the latter the systems of sensations, or some of them coming from the anæsthetic area are no longer connected with the main consciousness."

According to many writers, Janet's view of hysteria, thus briefly and imperfectly mentioned, is the most satisfying, and that one which harmonizes the varied and multiform symptoms of the disease. But even those who support it most warmly feel that it does not explain every variety of the malady.

The second theory is that associated with the name of Babinski, the physician of La Pitie, who has done more than any living clinician, by his observation on the plantar reflex and by other tests, to assist us to distinguish between functional and organic paralysis. He holds that hysteria is a special psychological state giving rise to certain symptoms, which can be reproduced by suggestion with rigorous exactness in certain subjects and be made to disappear under the sole influence of persuasion.

By this means Babinski confines the symptoms of classical hysteria to those which can be reproduced by suggestion. These are the convulsions, paralyses, contractures, tremors and anæsthesias, and to them he has given the term "pithiatic." He has, in fact, taken one of Charcot's main contentions, that to be hypnotisable is to be hysterical and that exaltation of suggestibility is common to hypnosis and hysteria, and made it his criterion of hysteria.

One of the most interesting deductions from the Babinski view is that hysterical hemi-anæsthesia does not really exist, but that when present it has been suggested to the patient by maladroit examination on the part of the physician.

In one hundred consecutive cases of hysteria, Babinski failed to discover a single instance of hemi-anæsthesia. There is, however, a general consensus of opinion that this explanation is only true for a limited number of cases.

Babinski's views have been strongly criticized, chiefly in the direction of the value of suggestibility as a crucial test of hysteria. It has been stated that the majority of normal persons are suggestible. "To be suggestible and to be hysterical are not synonymous. It is generally agreed that suggestibility cannot be utilized to describe sufficiently and exclusively the hysterical mind. Hence we are led to consider hyper-suggestibility as a symptom, and effect, rather than a cause of the mental state associated with hysteria." (Wilson.)

The third theory of hysteria to which reference is made is that elaborated by Freud, the Viennese psychologist. His view is based on the the acceptance of certain doctrines—the determination of mental processes by unconscious physical factors, the existence of what he

calls emotional "complexes" which are often in antagonism with each other, and the causation of many mental phenomena as a result of repression. In this as in Janet's view there is a recognition of the sub-conscious mind.

Freud's psychology of hysteria is briefly as follows:—If in a person two sets of mental or emotional "complexes" are present in opposition to each other, or a mental, or moral or emotional shock is received, for example, a physical trauma, a painful impression is made upon the mind. If relief is not obtained in an ordinary way, as by giving vent to the feelings, or forgetting, the painful emotion is repressed into the subconscious strata of the mind. There it is kept and prevented from returning to consciousness by the action of a resisting force, which is the same as that which originally brought about the repression. The repressed complex remains in the sub-conscious mind behaving somewhat in the nature of a foreign body, capable of influencing consciousness, but in a distorted or indirect way. In hysteria it is converted into the physical manifestations of the disease, such as the paralysis and the anæsthesias. How this "conversion" is produced is a complicated and elaborate subject, which cannot be entered into here.

The outstanding feature of Freud's hypothesis is that the repressed complexes are invariably of a sexual character. In his own words: "he who can interpret the language of hysteria can understand that the neurosis deals only with repressed sexuality." "In a normal *vita sexualis* no neurosis is possible."

"In the hysterical we find all sex components which exist in the undeveloped sexual constitution of the child, in a state of repression. The essential basis of hysteria is thus the preservation of an infantile form of sexuality and the failure of the latter to develop into the normal adult type. The hysterical symptom is produced as a compromise between the normal outlet, the abnormal outlet, and the repressing forces exerted by education and environment." (Hart.)

It is difficult at the present time to express an opinion upon the value of Freud's views upon hysteria. He has revived the oldest doctrine of the disease (its sexual origin), but upon a psychological basis. In re-introducing the sexual element as the sole factor in hysteria and allied neuroses, he has opened the flood gates for a veritable torrent of criticism. He has been attacked vigorously by his opponents and as strenuously supported by his disciples and admirers.

Any criticism, however, of Freud's view ought to separate the hypothesis which he has enunciated, such as his conceptions of conflict, repression, and the influence of the sub-conscious mind from the method of psycho-analysis, by which he has arrived at his conclusions. There is a strong body of opinion against the universal application and accept-

ance of the sexual origin of hysterical symptoms. Moreover, his views upon the "conversion" of a repressed idea into the physical symptoms of hysteria would require some further explanation than has yet been given.

*Psycho-Therapeutics.*—In view of the generally accepted psychical origin of all hysterical symptoms, as well as those of the closely allied psychoneuroses, such as the mental symptoms of neurasthenia, morbid fears, dreads, obsessions, and the like, it is not unnatural that the present-day methods of treating those conditions should consist in the main of psychical measures.

The influence of some kind of suggestion in the treatment of functional nervous disorders has been admitted from time immemorial; witness the influence of religious faith. But apart from this, have we not the cures effected by charlatans, by the pseudo-scientific methods of metallo-therapy and the like, and by the wonder-workers in all countries.

The moral influence of medical men over their patients has, of course, been long recognized, but there would seem to be something more than verbal encouragement or reassurance necessary in the psycho-therapeutics of to-day.

As Mills says: "In a sense, mystic medicine is psychical medicine, though the converse is not true. In the incantation of medicine men, in the appeals to omens and oracles, in the resort to healing shrines, and in the ministrations of the Christian Scientist, the psychical element is discoverable. The psychical medicine of to-day, however, is that in which the use of mental influence is resorted to on the same scientific lines, as is the use of water, medicines, electricity, or the surgeon's knife."

The modern methods of psycho-therapeutics are limited to the following:

Firstly, *direct suggestion*. Of this there are two kinds, in one of which suggestion is effected during hypnotic sleep, in the other during the waking state. During hypnosis the physician introduces new ideas into the patient's consciousness or effects the destruction of existing ideas without the consent or judgment of the sufferer. In suggestion during the waking state the patient voluntarily places himself in a receptive condition to receive and accept suggestions made to him by the physician without argument or reason.

Suggestion during the waking state was introduced as a therapeutic method by Bernheim of Nancy, as a development out of hypnotic suggestion. According to Dejerine its good effects are based partly on wonder-working and partly on Auto-suggestion. In most cases, however, it is really a form of persuasion. Dubois holds that between suggestion

and persuasion there is the same difference as exists between a piece of good advice and a practical joke. "Both may produce the desired result. Suggestion acts like a draught which is merely capable of producing an effect on the imagination. It is sometimes excusable, but it is not conscientious." (Dubois.)

There is no doubt, however, that in practice suggestion during the waking state may be of distinct value in certain early and mild cases of psychical upset.

Secondly, *persuasion*. This implies the re-education of the patient's mind by reasoning and argument. The method was introduced by Dubois of Berne, and in various modified ways is the remedy applied by many physicians who work along psycho-therapeutic lines. The physician endeavors to reason with and educate his patient in the causation and production of his symptoms. It is, in fact, what may be called the method of *therapeutic conversation*. Its object is to teach and convince the patient "what he has, what he has not, what he seems to have, what he can do, what he cannot do, and what he simply believes he cannot do." (Mills.)

But there would appear to be something more in the method than mere verbal explanation. In Dejerine's words, persuasion reasserts the patient's confidence in himself, and revives those elements which make him master of himself. The physician's part lies in re-directing the patient's thoughts; there is nothing bordering on suggestion and nothing to clash with his convictions and reason. Its good effects are due to the confidence which the physician inspires in his patient.

It is therefore obvious that it can only be effective in sane persons, and is of no value in severe obsessional conditions or melancholia.

Thirdly, *psycho-analysis*. Re-education of the patient, in the meaning and significance of his symptoms implies some degree of psycho-analysis on the part of the physician. In a general sense, it is nothing more than a careful and exhaustive investigation into the origin, relation and importance of existing symptoms.

In the sense employed by Freud, however, psycho-analysis is a more elaborate proceeding and requires skill, patience and perseverance. It is not my intention to describe the method, but merely to point out that its object is to get behind the "censure," or repressing force which originally repressed and keeps suppressed the pathogenic idea in the sub-conscious strata of the mind. This pathogenic idea it will be remembered is that which gives rise, in Freud's view, to the symptoms of hysteria and the psycho-neuroses. Having by psycho-analysis overcome this resistance and given the "affect" an opportunity of flowing out through speech, the repressed idea is "brought into associative correc-

tion by drawing it into normal consciousness through the suggestion of the physician." (Freud.)

In the hands of Freud himself and of his disciples, both in Europe and on this side, the method is stated to be of practical value, but one cannot help feeling that owing to the prominence given to the sexual side in the causation of hysterical symptoms, harm may accrue by recalling sexual memories, in themselves perhaps harmless, which had long been forgotten.

During the analysis, it is not unlikely that the physician may unwittingly suggest to his patient, and in turn may himself be misled.

In Freud's sense, therefore, psycho-analysis is the evacuation of a repressed idea by a form of confession, and the re-conduction to the patient's consciousness of the thoughts underlying the symptoms. It would appear to be of great use in hysteria and some of the psycho-neuroses, but to be of little value in neurasthenia and states of anxiety.

I do not think that it requires much experience of the practical application of these methods of psycho-therapy to realize that they have their limitations. There are some psycho-neuroses of short duration and slight degree, which are readily cured by a little reasoning and convincing on the part of the physician; but there are many instances of obsessions, hesitations, doubts, anxiety, and morbid fears, which are difficult to cure by psychical means alone. On the part of the physician a knowledge of the causes and symptoms of hysteria and allied neuroses is essential, as well as a clear insight into the temperament of the patient. On the patient's part, faith in the method and in the man behind the method are essential to success.

I do not imply that it is not in the power of every earnest physician to so influence the mind of his patient by dissipating pessimism and by encouraging a healthy outlook to materially aid a cure.

But for the successful treatment of the psycho-neuroses by psychical means, a thorough knowledge both of the diseases and of the means of treatment is essential. A special class of practitioner has in consequence arisen; but it would seem to me as if those who give their attention to mental and nervous diseases are those best qualified to undertake this work.

I am, therefore, in complete agreement with those who advocate the necessity of physical means in conjunction with psycho-therapeutic efforts. The isolation of the patient in a home, institution or special ward, the deprivation of visits from relatives and friends during the course of treatment, the cutting off of correspondence and the like, are all essential adjuvants to a successful issue. Rest in bed, either indoors or in the open air, abundance of milk, massage and regulated exercises are desirable in the majority of cases.



## PERSONAL AND NEWS ITEMS

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*Ontario.*

The late Miss Agnes Shields, of Toronto, left \$5,000 for the Cottage Sanitarium at Gravenhurst.

Mr. Schuyler, a farmer near Waterford, has made a disposition of \$2,000 in his will to the Muskoka Free Hospital for Consumptives. This is in compliance with the wish of his son who died a few years ago of this disease.

Dr. Alfred Bowlby, a physician of Waterford, has made a donation to the Muskoka Free Hospital for Consumptives. Dr. Bowlby is 92 years of age and is still following his professional duties.

Dr. and Mrs. Allen Baines left for England in the early part of July.

Dr. and Mrs. Sterling Ryerson, Miss Ryerson and Mr. and Mrs. Yoris Ryerson are spending their holiday by the sea.

The amount of damages awarded at the trial by Mr. Justice Riddell to Dr. Bateman against the County of Middlesex, for injuries he received when his carriage was upset on a defective road at night, was reduced from \$12,500 to \$10,000.

The Senate of Queen's has appointed Dr. Frederick Etherington as medical adviser of the newly organized physical department of the University. Last Spring it was decided that all students must undergo physical examination before taking a course in the gymnasium.

Doctor McNally of Owen Sound has received word of his appointment to the new position of Medical Overseer with headquarters at Palmerston. This is a Dominion Government office, and covers the counties of Wellington, Waterloo, Perth, Bruce, Grey and Dufferin. Dr. McNally is at present along with similar overseers undergoing a special course prior to assuming the position.

Dr. W. E. Struthers, Chief Medical Inspector of Public Schools for Toronto, sailed for Britain early in July. He will spend two months studying the inspection methods of Britain. He will also visit the open air schools of Germany.

The meetings of the Graduate Nurses of Toronto are over for the season, and after consideration it was decided that no further discussion concerning raising the fees would take place till the fall, and the rates remain the same, \$18 a week for ordinary cases, including pneumonia and typhoid fever, and \$21 for maternity and contagious cases.

Mr. J. J. Kelso, Superintendent of Neglected and Dependent Children, who has returned from a trip through the western provinces,

speaks most hopefully of the progress being made in child welfare work. The enthusiasm of the western people for all that tends to the greater comfort, happiness and well being of the rising generation, is most gratifying. Playgrounds have been overlooked in most of the older towns, but these are now being advocated and will no doubt be more amply provided in the future.

The citizens of Guelph voted down a by-law to grant \$25,000 to the hospital for improvements and additions.

Upon the proclamation bringing the new regulations under the Public Health Act of Ontario into force, the Provincial Board of Health will undertake the task of sending information to all tubercular patients, who will be reported under the provisions of the act affecting communicable diseases, the best methods to be adopted looking towards proper sanitation and ventilation and treatment. This information is to be sent to each patient as confidential matter, no publicity is to be employed, the board exercising its office merely to assist the patient towards recovery, as well as to prevent the spread of the disease. Distribution will be in charge of Dr. J. S. W. McCullough, Secretary of the Provincial Board of Health.

Dr. J. W. Russell, of Toronto, has been appointed as associate coroner for Toronto.

Dr. Colin Campbell, of Toronto, is enjoying a motor trip through England and Germany.

Dr Fred Parker, of Milverton, Ont., has spent two months through the Western Provinces and the Western States.

The new wing of the Toronto Isolation Hospital has been opened. It is intended for diphtheria and has observation wards. It is hoped by this means to lessen the risk of mixed infection. The addition cost about \$100,000. The patients will be kept under observation five days. Every precaution is taken in going from one section to another.

The filtration plant for Toronto is already too small by 12,000,000 gallons a day. This forces those in charge of the water supply to pump direct from the lake and give the water an extra dose of chloride of lime. A second plant is proposed.

The Provincial Board of Health is issuing circulars dealing with flies, mosquitoes, and the disposal of sewage at summer resorts. The circular points out the law and urges that steps be taken to control the evil results of carelessness in these respects.

The tenders for the Hamilton Children's Hospital totalled \$35,832. As it had been decided not to exceed \$32,000 action was deferred for a time.

Dr. Franklin Dawson, of Toronto, left for England on 18th July. He is to be absent about two months.

The water situation in Ottawa has become serious and typhoid fever has again broken out. The medical health officer has to issue the familiar warning "boil the water." There were about sixty cases very shortly after the water became polluted.

The Council of Toronto declined to advance the salary of Dr. Hastings by the addition of \$1,000 a year, making it \$6,000.

There are new pavilions for consumptives being erected at Gravenhurst and at Weston. When these are completed there will be accommodation all told for 300 patients in each of these institutions.

Port Arthur is seriously considering the advisability of securing its water supply by gravity from the watershed and abandoning the lake supply, as the lake is becoming polluted.

The friendly societies in Toronto and the Trades and Labor Council are urging the Board of Control should establish a municipal hospital.

Dr. H. H. Kirby, Hawkesbury, has been appointed associate coroner for the United Counties of Prescott and Russell.

Dr. J. N. Richard, Warkworth, has been appointed associate coroner for the United Counties of Northumberland and Durham.

Dr. E. K. Henderson, eye, ear, nose and throat specialist, has returned from Vienna to 327 College Street.

Dr. and Mrs. T. Millman are spending their holidays in the Adirondacks.

The will of the late Dr. Alexander Anderson, which has been on file in the vaults of the Surrogate Court, of London, since the doctor died in 1873, has now been entered for probate since the death of his wife, in whose charge the estate rested during her lifetime, and by it Victoria Hospital is to receive \$5,000, and Mount Hope Roman Catholic Orphanage \$1,000.

The meeting of the Canadian Public Health Association will be held in Toronto on September 16, 17 and 18, and an interesting program will be presented. At the same time the Annual Conference of the Health Officers will be held.

Dr. Nelson Tait, of Toronto, has recovered from his poisoned hand. He lost a portion of one of his fingers.

Dr. T. S. Webster, of Toronto, is having a holiday in Britain and on the continent.

Dr. H. A. Williams, of Allenford, Ont., is going to Europe in September for post graduate study.

Dr. Colin Campbell, of Toronto, spent two months in Europe.

Dr. J. N. E. Brown, who for a number of years acted as medical superintendent of the Toronto General Hospital, has accepted the position of medical superintendent of the hospital in Detroit. His friends will wish him every success.

New hospitals are to be erected at Porcupine and Timmins in New Ontario.

The late Dr. Clemesha left \$10,000 for a hospital in Port Hope, provided the hospital is erected within ten years. The late John Helen left \$20,000 for a Port Hope hospital.

The Victoria Hospital, London, is spending \$10,000 and the city \$15,000 in additional accommodation and improvements in the hospital. The hospital admits about 150 patients per month.

Sixty-one cases of contagious disease are reported by the Provincial Board of Health for the week ending July 27th, with 9 deaths. Diphtheria leads with 22 cases and one death; then tuberculosis with 9 cases and 5 deaths; scarlet fever, 8 cases and one death; typhoid, six cases and no deaths.

The people of the village of Union have entered a strong protest against the proposal of the Windsor Daughters of the Empire to erect a consumptive sanitarium near there. The committee have tried to establish it near Windsor, Amherstburg and Sandwich, and each time have met with opposition.

Miss Edey, who died last May in Thornhill, leaves her estate of \$9,080, after the lifetime of her sisters to the Home for Incurables, Toronto.

Queen's University fund now reaches \$282,547. When the fund reaches \$400,000 Andrew Carnegie will subscribe \$100,000. Justice MacLennan, Toronto, has just donated \$20,000. Principal Gordon has issued a statement regarding the fund and is making a special appeal to raise the amount to \$400,000 so that Andrew Carnegie's grant of \$100,000 can be secured.

Dr. Hastings, of Toronto, has sent to Ottawa six nurses to care for patients ill with typhoid fever. The situation is becoming serious.

Dr. B. E. McKenzie, of Toronto, is in Europe at present. He spent some time with Mr. Robert Jones, the orthopedic surgeon of Liverpool. He went from there to Paris.

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### *Quebec.*

The late Mr. John Torrance Vanheck, who died in France during February last, bequeathed to the Montreal General Hospital \$500,000.

Dr. Devlin, of Montreal, was shot a few days ago by a lunatic who was being deported. One bullet penetrated his left lung and fractured his collarbone. The other bullet lodged in a vertebra. He is in a critical condition.

For some years past the Grosse Isle quarantine station has been

in a bad state, the buildings being delapidated or unsuited for the purpose. The Government has decided to improve conditions and a new hospital will be erected and the improvements made without delay.

So we learn from *The Montreal Star* that Montreal really has slums that are injurious to health. One would have thought that this was known a hundred years ago. People are slow to wake up in matters of health. There are districts in Montreal which are only fit for rats to live in. If these districts were cleaned up there would be a deliverance from the rats as well as from much disease. Little old houses, dirty narrow streets, ignorant and dirty people are not conducive to health. The time may come when such habitations will no longer be permitted within the city.

During the week ending 13th July there were 210 deaths among infants due to the heat.

Dr. George T. Ross, Mrs. Ross and Miss Jeanne Ross, of Montreal, have gone to the Maine Coast.

A bequest of \$10,000 to the Montreal Hospital figures in the will of the late H. Markland Molson, the Montreal banker who lost his life in the Titanic disaster. The sum of \$1,000 is also made in favor of the Society for the Prevention of Cruelty to Animals. The will was made on the 25th of January last, a short time before the departure of Mr. Molson for London.

Some time ago an association was formed in Montreal with the object of raising one hundred thousand dollars to secure an institution for the English-speaking blind. Lord Stratheona gave \$10,000 and the committee raised \$90,000. The money is now in hand to go on with the objects of the association.

Infant mortality is still very high in Montreal. It is a pleasure to be able to note that Dr. A. D. Blackader is doing good work in the way of arousing an interest in preventive medicine.

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#### *Maritime.*

After further consideration, the Halifax Board of Health has decided to admit to the Hospital for Infectious Diseases cases from the Military and Marine and Fisheries Department. This privilege had been withdrawn by the Board of Health. It is agreed that thirty days' notice may terminate this arrangement.

The report of Provincial Sanitarium for Nova Scotia shows that

good work is being done. Fifty-five patients were treated during the year. Thirty-nine were discharged and 98 per cent. of these were apparently cured, disease arrested, or improved. The experience of the institution is quite in favor of the use of tuberculin. Two open air pavilions are to be erected.

A new wing is to be added to the General Hospital in St. John, N.B. The cost is estimated at \$30,000.

The Duke of Connaught opened with a golden key the new Prince County Hospital, P.E.I.

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*Western Provinces.*

Dr. Henry Chubb Lindsay, of Vancouver, B.C., was married recently to Miss Eva G. Robertson.

Dr. Ernest Hall and family have located at 1185 Burnaby Street, Victoria, B.C.

Drs. Simpson, Halpenny and Gorrell, of Winnipeg, have occupied offices in the new Sterling Bank Building.

In the recent elections in Saskatchewan the following doctors were elected: Dr. Lothead, Gul Lake; Dr. MacNeill, Hanley; Dr. Nuthill, Weyburn.

There has been a keen controversy between the Regina Department of Health and Provincial Health Department over the sanitary arrangements in the plans of an apartment block. Dr. Seymour, the Provincial Health Officer, undoubtedly has the authority under the Act to decide finally upon the air space, the bath rooms, etc.

The addition, costing \$75,000, to the Regina Hospital has been delayed owing to a difference of opinion between the City Commissioners and the Department of Health and Relief. This is to be regretted as the funds had been voted some time ago.

Arrangements are being made for the affiliation of the University of Calgary with the University of McGill.

In Victoria, B.C., there has been carried on an active campaign for funds for a new Jubilee Hospital.

Dr. W. A. Coles, of Regina, has gone abroad for a period of post-graduate study in Europe.

Dr. J. E. Knipfel has removed from Broderick to Cabre, in Saskatchewan, where he will continue the practice of his profession.

Hon. Dr. Roche, Secretary of State, was in poor health for some time. After resting at his home in Manitoba, he spent a few weeks at Banff to recuperate his health.

Dr. J. G. R. Stone, formerly of Steelton, Ontario, has located in Greenwood, B.C.

British Columbia is reputed to have the hardest standard for qualification to practise there of any of the provinces. The papers are difficult and the marking close.

The hospital at Red Deer, Alberta, has been handed over by the trustees of the municipality. It will be enlarged to meet the needs of the locality. It is expected that about \$15,000 will be expended on the institution.

The hospital at Cumberland, B.C., is to be enlarged. There will also be an Isolation Hospital there.

In Edmonton a new Isolation Hospital is being erected to take the place of the one destroyed by fire. When this building is completed the temporary Isolation Hospital will be used for small-pox cases.

A vigorous campaign for funds for a new hospital for Victoria, B.C., has been inaugurated. The present hospital is inadequate and out-of-date. It is expected to collect \$300,000.

The Winnipeg Sanitarium which is at Elmwood is for nervous diseases.

The British Columbia Government has made an additional grant of \$10,000 to the Kootenay Lake Hospital.

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*From Abroad.*

The Antivivisectionists are busy in Britain. They are now decrying tuberculin as a filthy, useless and dangerous nostrum. This is using as strong language as such ignorant people might be supposed to be able to command. It may be that they have a paid *coach*.

Lord Guthrie, in the High Court of Edinburgh, in sentencing a medical practitioner, Dr. George Bell Todd, of Glasgow, to seven years penal servitude for illegal operations said: "I cannot accept the fact that the married women were accompanied by their husbands as a palliative; rather it aggravated the case. Married women will be tempted by the knowledge that the skill of a competent medical man makes such an operation comparatively safe. It is a crime which, I suppose, is abhorrent to the natural instincts of the lowest humanity. I think I shall be doing my duty in the interests of the State and of such wretched women as have been concerned in this case, and the noble profession you have dishonored, if I now sentence you to seven years' penal servitude."

The General Medical Council of Great Britain has removed from

the medical register the name of James Wallace Robertson for his connection with the institution carried on by Eugen Sandow, who is not qualified.

Hon. Lewis Harcourt said the other day in the British House of Commons that until international action could be secured it would not be well to take further steps towards the suppression of the opium traffic, as its suppression was causing other vices that threatened to be more injurious.

The question of suicide is being much debated in Japan. When a person does wilfully or by neglect an act that causes public harm or inconvenience to those in authority, he commits suicide, as a rule. Ten thousand committ suicide annually. The favorite method is for the person to throw himself into one of the active volcanoes. Hara-Kiri is dying out as a method of taking one's life. Jumping in front of a moving train is becoming common.

It is reported from Milan that Professor Lanfranchi, of the University of Parma, famous for his researches into the causes of sleeping sickness, has, after four years' fruitful experiments upon animals, himself fallen a victim to the disease. It is supposed that the infection was communicated through cracked skin on his lips.

Dr. Henry Whitaker, for many years the medical superintendent of health for Belfast, died recently at the age of 79. He was one of the best known and most highly esteemed physicians in Ireland.

The General Medical Council of Britain adopted the following on the motion of Sir Charles Ball and Dr. Norman More, "That, in the opinion of the Council, it is important in the public interest that a uniform standard of medical and dental education and registration should be maintained in Great Britain and Ireland, and that accordingly steps should be taken to procure the insertion in the Government of Ireland Bill of provisions, reserving to the Imperial Parliament the control of legislation relating to the Medical and Dentists Acts; and that the President be requested to communicate this resolution to the Lord President of the Privy Council."

It is reported that Prof. Wilhelm Crugel, of the agricultural and hygiene department of the University at Rostock, states that he has not only located the bacillus which causes foot and mouth disease, but that he has also discovered a preventive serum making cattle immune.

Dr. F. A Sommer, of Portland, Oregon, operated on a boy 17 years of age for a gun shot injury to the heart. The wound in the organ was closed with satures and the boy recovered.

It is announced that the gross receipts of the selling of roses in London by duchesses and others on Alexandra Day for the benefit of the hospitals amounted to \$85,000 gross or \$60,000 net.



Havana, July 6.—A special board of physicians appointed to investigate the suspected case of bubonic plague at Las Animas Hospital, announced that the result of their bacteriological examination conclusively showed the presence of plague. The existence of this case is taken as an indication that there are probably a number of others, and the most stringent precautions have been ordered, including the general cleaning up of the city, house-to-house visitations, the destruction of all disused furniture and other rubbish and the extinction of all rats. No decision has yet been reached as to whether the government will declare interior quarantine against Havana.

The news comes that Dr. Forbes Ross thinks that the use of potassium salts is of much value in the treatment of cancer. He is of the opinion that cancer is caused by an exhausted condition of the epithelium cells due to the deprivation of these salts. Some instances are given of the value of these salts for the relief of cancer cases where operation was not possible. Most surgeons and physicians will call for time.

Dr. Augustus B. Wadsworth, of the Department of Bacteriology in the University of Columbia, has been making extensive study of a serum for pneumonia which he now claims is effective in the case of animals and feels confident that it will prove equally so in the case of man.

Dr. Norman Moore read a paper before the Royal Medical Society of London and showed that syphilis was a common disease in Europe about the year 1500. There is no indication in the writings of Galen or Hippocrates that they had recognized the disease in any of its forms. It appears that the disease made its appearance in Europe in the fifteenth century.

Dr. A. T. H. Waters, consulting physician to the Infirmary, Liverpool, died a few weeks ago. He was born in 1826. For many years he was a distinguished physician and writer. He held a number of high official positions.

Rickman John Godlee, President of the Royal College of Surgeons, England, has been made a baronet and knighthood has been conferred upon B. G. A. Moynihan, John Bland Sutton, St. Clair Thomson, Abraham Garrod Thomas and Alexander F. Bradshaw. There are well known medical and surgical names.

Recent research has proven that the *glossina morsitans*, as well as the *glossina palpalis*, can spread sleeping sickness.

Dr. Piery has discovered the tubercle bacilli in the perspiration of consumptive patients. From this source of infection he has inoculated successfully guinea pigs.

The University of Dublin was founded in 1311 by a bull of Pope Clement V. and gave permission to admit worthy persons to be doctors. In 1617 Trinity Hall was opened by Dr. John Stearne, who was the founder and first president of the Dublin College of Physicians.

President Falconer, of the University of Toronto, while in Edinburgh, made a strong plea that that university should give greater privileges to Canadian students for post-graduate and research work. This would tend to lessen the tendency to go to the universities of the United States by young Canadian graduates.

Prof. Ramsay Wright, so long known in Toronto as professor of biology was honored recently by the University of Edinburgh conferring on him the degree of LL.D., *honoris causa*.

Prof. Eli Metchnikoff has carried his sour milk theory to the length of claiming a cure for diabetes. The bacillus he obtains by culture he calls *Bulgaricus*, after the Bulgarians. The bacilli are given to patients suffering from diabetes. These germs pass through the stomach alive and liberate lactic acid in the intestines. In this way the disease is cured.

The September issue of the *Proctologist* will contain the papers and discussions of the American Proctological Society for 1912.

The fourth annual meeting of the American Association of Clinical Research will be held in New York on 9th November, 1912. There will be an interesting program in which the following subjects will find a place: The Negri Bodies, on certain Fluids for Tubercle Bacilli in the Urine, on Adjust and Function, on Psychoanalysis and Traumbedeutung, on a Pandemic of Malignant Encapsulated Throat Coccus, on The Single Remedy on Indicanuria and Glycosuria, on Disease Conditions expressive of Correct Diagnosis, on Biochemic Problems, on The Two Most Far-Reaching Discoveries in Medicine, and others are to be given.

The Third Clinical Congress of North America will be held in New York City, the week of November 11 to 16, this year. The Congress was organized in Chicago three years ago as a result of an informal invitation issued by *Surgery, Gynecology and Obstetrics* to its subscribers to attend for a fortnight the surgical clinics of the surgeons of Chicago.

The Fourteenth Annual Meeting of the American Hospital Association will be held in the Hotel Ponchartrain, Detroit, Mich., on Tuesday, Wednesday, Thursday and Friday, September 24, 25, 26, 27, 1912.

Edinburgh has an active and arranged post-graduate course. This year the scope of the work has been considerably extended.

The University of Edinburgh has appointed Dr. J. J. Graham Brown, Lecturer on Neurology, and Dr. Harry Raing, Lecturer on Physical Methods in the Treatment of Disease.

The Bombay Medical Bill has now come into effect. By it there will be a Medical Council of thirteen. Of this council six will be chosen by the Government and seven will be elected by the medical profession. It is thought by the *Antiseptic* that the time is not far distant when there will be a similar medical bill for all India.

Dr. William Murrell, Senior Physician to Westminster Hospital, London, died a few weeks ago. Dr. Murrell was widely known as an authority on therapeutics and clinical medicine. He was an extensive contributor to medical literature. His writings bear the evidence of a sound judgment.

The trustees of the American Gold Medal Award have bestowed the medal for 1912 upon Dr. William C. Gorgas, of Ancon, Panama, for his splendid work in perfecting the sanitary conditions of the canal zone.

Absinthe is now attracting much attention in France. The use of this drug is now assuming very large proportions. The government gets a revenue of \$10,000,000 a year from the sale of absinthe liquor.

Buffalo is having an epidemic of infantile paralysis. The cases are so numerous as to yield strong confirmation to the theory of contagion. Twenty-five cases are confined to a very small area. Most of the cases are among foreigners.

The new Sanitarium for Consumption near Dublin was destroyed by a mob. The people did not wish the institution near them.

The British Medical Association has decided to boycott the insurance scheme of the Government on account of the fees paid doctors for their services under the Act.

A rat infected with bubonic plague was recently found in New Orleans.

The Eugenics Congress held recently in London was a marked success. It was attended by four hundred delegates from twelve countries.

Dr. Rentoul, at the meeting of the British Medical Association, urged the formation of a medical service to be controlled by the medical profession. He thought that nationalization of medicine was not as far off as many thought.

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## OBITUARY

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HON. JOHN HENRY WILSON, M.D.

Senator John Henry Wilson, M.D., of St. Thomas, died on 3rd July at his home. He had been in failing health for some time, but the end came rather suddenly, as the result of a fall. He was born in the city of Ottawa in 1833, and was in his 79th year at the time of his death. His father was a native of Vermont, and his grandfather a United Empire Loyalist, and a veteran in the American Revolutionary War. The late Dr. Wilson taught school in Middlesex and Elgin and was then studying medicine. He graduated in Toronto in 1857 and in New York in 1858. For two years he was professor of anatomy in Victoria College. In 1860 he located in St. Thomas where he practised his profession until death. He was elected to the Ontario Legislature in 1871 for East Elgin as a Liberal, and again in 1875. He was elected in 1882 for the same riding to the House of Commons and again in 1887. He was defeated in 1891. He was made a senator by the government of Sir Wilfrid Laurier.

In 1870 he married Amelia Williams, of Toledo, Ohio, a lady of marked ability. His widow survives him and also one brother, Dr. Jesse Wilson, of Rochester, Michigan.

Dr. Wilson was a noted figure in St. Thomas and the public life of Western Ontario. He was an able practitioner and a most estimable citizen.

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JOHN ODLUM, M.D.

Dr. Odlum died at his home in Woodstock on 27th June. He had been in poor health for a year. He had a large practice in and around Woodstock, where he had resided for 26 years. He graduated from Queen's University in 1880, and obtained his license from the College of Physicians and Surgeons the same year.

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EDMOND GAUVREAU, M.D.

Dr. E. Gauvreau, director of the Quebec Province Vaccine Institute, died in Quebec City on 28th June. He was in his 65th year and a well known physician. He was married in 1874 and had seventeen of a family, but only five of these survive him.

## FREDERICK CHARLES BOYD, M.D.

Dr. F. C. Boyn died in Kingston on 5th July. He was in his 23rd year. He graduated from Queen's as B.A., M.D. He took a year's post graduate course in Columbus Hospital, New York. Last December his health began to fail and he was compelled to give up work and return home. He was a very brilliant student and carried off medals and prizes. Tuberculosis was the cause of death. He was a native of Kingston.

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## HUGH WALKER, M.D.

Dr. Walker died at Elsinore, California, on 15th July. He was a former resident of Belleville, Ont., where he was born in 1872. He was a graduate of Queen's Medical College, Kingston. He leaves a widow and one child. He had been in practice for a number of year in Elsinore.

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## ROBERT EARLE BRETT, M.D.

Dr. Brett died on 5th June at Banff. He was well known in that locality, as he was the son of Dr. R. G. Brett, and took an active interest in athletic amusements. The cause of death was an attack of peritonitis

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## FRED. W. SEIFERT, M.D.

Dr. Seifert had practised for a number of years at High River, Alberta. Three years ago he took the position of surgeon on one of the Elder-Dempster ships. He was stricken down with fever on board the ship and died on the west coast of Africa at Forcador.

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## HON. JACOB BAXTER.

Dr. Baxter was born in the Township of Bertie, in Welland County, on 6th June, 1832, and died in Cayuga on 23rd July, in his 81st year. In 1867 he was elected a member of the Ontario Parliament for Haldimand County. He continued to represent that county until 1898, when he retired and accepted the position of Registrar for the County of Haldimand, which office he held until his death. He was speaker of the Ontario Legislature from 1887 to 1891. He took an active interest in military affairs. He was surgeon to the 2nd Battalion of Haldimand, and continued in a similar capacity for the 37th Regiment. He had

medals for serving in the Fenian Raid and for long service. He graduated in 1853 from the old Medical Board, from University of New York in 1854, from Bellevue in 1866, and in 1891 the degrees of M.D., C.M., of Trinity, *honoris causa*. He was a highly esteemed citizen. He is survived by his widow and two sons, Dr. R. J. Baxter, of Conneaut, Ohio, and Col. E. S. Baxter, of Cayuga.

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#### DANIEL A. MUIRHEAD.

Dr. Muirhead, of Carleton Place, was accidentally killed on 23rd July. While riding in an automobile the car ran into a ditch and turned over and fell on the doctor. He lived only an hour after the accident. He was one of the best known physicians in the Ottawa Valley. He was unmarried and about 50 years of age. The accident occurred near North Gower. He graduated M.D., C.M., from McGill University in 1888.

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#### T. D. WHITE.

Dr. White died at Nepigon. At the time of his death he was acting as surgeon to a portion of the Grand Trunk Pacific. He was a son of the late Mr. Thomas White, of Brantford.

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#### NORMAN F. CUNNINGHAM.

Dr. Cunningham was in his 64th year at the time of his death. He had been in practice in Dartmouth, N.S., for thirty years. He was a graduate of Dalhousie University, Halifax, and Bellevue, New York. At one time he was president of the old Medical College in Halifax, and taught medicine. He was one of the best known medical men in Nova Scotia. He is survived by his widow, one son and two daughters. He was ever regarded as a practitioner of unusually sound judgment.

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#### T. R. GATES.

Dr. Gates died at Caledonia, N.S., in his 47th year. After an exposure he developed an attack of pneumonia. He leaves a widow and two children.

## H. LEROY FULLER.

Dr. Fuller died at Sweetsburg, in Quebec, after a lingering illness. He was born in Sweetsburg in 1840. He was a graduate in Arts of the University of Vermont, and, at one time, taught school. He graduated in medicine from McGill in 1870. He was much esteemed and leaves his widow, a daughter and a son, Dr. H. L. Fuller.

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## R. SENEAL.

Dr. Senecal died at Riviere Ouelle, Quebec, in his 28th year.

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## WILLIAM J. JOHNSTON.

Dr. Johnston died at Merrickville where he had practised since 1891. He had a large and appreciative clientele.

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## BOOK REVIEWS

## SYMPTOMS AND THEIR INTERPRETATION.

By James Mackenzie, M.D., LL.D., Aber. and Edin., Lecturer on Cardiac Research, London Hospital; Physician to Mount Vernon Hospital; Consulting Physician to the Victoria Hospital, Burnley; author of "Diseases of the Heart," "The Study of the Pulse, Venous, Arterial and Hepatic, and the Movements of the Heart," etc. Second Edition. London: Shaw and Sons, 7 and 8 Fetter Lane, E.C., Printers and Publishers; 1912; price, 7s. 10d.

This unique book has now appeared in its second edition. The author has come into prominence for his work on the heart and the pulse. In both of these he has caused much that had been accepted to be set aside and give place to new and more trustworthy teachings. For this work in the cardio-vascular system the medical profession has already abundantly manifested its appreciation. In the present work on "Symptoms and Their Interpretation" there is much to admire. It is original in the fullest sense. The author is not held by any of the views of the past. He sets for himself the goal of finding out what the facts are. His methods are original and his conclusions of a most important character. It is impossible to review a book such as this. It treats of so many phases of medical diagnosis that something would

have to be said on each topic. All that can be said is to praise the book and urge that every medical practitioner shall procure a copy and read it most carefully. He will never regret the time spent on its illuminating pages.

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### CANCER.

The Local Incidence of Cancer, by Charles E. Green, F.R.S.E. Edinburgh and London: William Green and Sons; 1912; price, 1s. net.

Every book or article that tends to throw light upon cancer is most welcome. We welcome this small work because there is so much in it that is helpful and that gives additional information on the hidden recesses of this subject. The author has arrived at the conclusion that the frequency of cancer varies very much in different localities. For this position he advances proof that seems to admit of no doubt. It is proof that the medical profession is looking. Of theory we have had enough and to spare. In the district of London the deaths from cancer to all other cases varied from 1.84 per cent. to 17 per cent. in different localities. In Scotland the frequency of cancer on the percentage basis to other causes of death varies from 1.76 to 9.73. The author has travelled over Scotland in every direction to find the cause for this difference. The theories based on differences in food, the existence of tall trees, the proximity of rivers, had to be abandoned. In these travels one thing became apparent, namely, "that localities where the death rate was low were comparatively flat, or at most had low, swelling, undulating hills, with houses built on their sides or summits, while those where the mortality was higher were intersected with gulleys and valleys, with the houses as a rule situated in the valleys." The author found that as a district with deep valleys gradually changed to an undulating or level one the death rate from cancer steadily fell. Dumbar-ton has a death rate from cancer of 1.81 per cent., whereas the shire has one of 7.37. The country is rugged and hilly, while the town is on a flat plain. In going over the mortality from cancer it was found that those towns lying in hollows have a very high death-rate, while those on level sites had a very low mortality from this disease. But this does not explain the whole case. The relation of the products of coal combustion is a factor. The presence of high buildings and the sides of hills cause interruption of the winds and the products of coal combustion fall upon the houses and act injuriously on the health of the people. We recommend this brochure.



## COMMISSION ON CONSERVATION.

Report of the Third Annual Meeting held at Ottawa, January 16th, 1912. Hon. Clifford Sifton, Chairman, and James White, Secretary. Published by John Lovell and Son, Montreal.

This work takes up such important topics as Forests, Lands, Publicity, Agriculture and Town Planning. There are also a number of reports by Committees on Public Health, Fisheries, Minerals and other powers. The Commission on Conservation is doing good service for the country. It is directing attention to how waste may be avoided and how natural resources may be put to better advantage.

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## INFANT MORTALITY.

Third report by Dr. Helen MacMurchy. Printed by order of the Legislative Assembly of Ontario.

This is a very valuable report. It goes into the causes of infant mortality and how to prevent it, and what is being done in this regard by many countries. The report sets out how much has been accomplished in some places by an intelligent effort to reduce infant mortality.

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CORRECTION.—In our issue of June, page 795, in the review of Dr. Crookshank's book, the term "chemical" was used for "clinical."

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## MISCELLANEOUS MEDICAL NEWS

## SESSION OF THE ONTARIO MEDICAL COUNCIL.

The Annual Session of the Ontario Medical Council began on 2nd July, 1912, in its building in Toronto. There were a number of very live issues up for consideration.

Dr. Edward Ryan, of Kingston, was elected president, Dr. Otto Klotz, of Ottawa, was chosen for vice-president, and Dr. J. L. Bray and Dr. H. Wilberforce Aikins were re-elected registrar and treasurer respectively. The appointment of a prosecutor in succession of the late Mr. Rose went to Mr. O'Connor, of Port Arthur. Mr. H. S. Osler was appointed solicitor, and Mr. George Angus stenographer.

Owing to the elimination of the primary and intermediate examinations, the report of the Board of Examiners indicated that the examination results were more satisfactory than ever before. At the Spring finals 150 graduates tried, 112 passed, and 37 failed. In the Fall examinations 51 graduates tried, 47 passed and 4 failed.

A fee of \$5 will be charged for a reconsideration of examination papers. Announcement was made that appeals had been granted in the following cases:—L. Corrigan, W. M. Williamson, Irvan E. Annett, and H. M. Gelland. The Fall supplemental examinations will be held on the first Tuesday in November.

There was considerable discussion on the action of the Legislative Committee with regard to the amendments that had been proposed at the recent session of the Legislature to the Medical Act of Ontario. Dr. James McCallum, who represents the University of Toronto, asked by whose authority the proposal had been made to recognize the osteopaths. He contended that this had never come before the Medical Council. He claimed that as the result of his action the Legislative Committee had incurred a liability of \$1,200.

Dr. T. W. Varden, of Galt, defended the action of the Legislative Committee. He thought that the Council should deal with the osteopaths now while there were only some 30 or 40 that could claim recognition. In a few years there might be 300 or 400 to deal with. He was not an advocate of osteopathy, but thought it well that they should be brought under the control of the Medical Council. This the amendment of last session would have done. If they were going to practise, it was proper that they be compelled to take a course of study that would ensure skill. After taking a course of medical study they could practise as eclectics, allopaths, homeopaths, osteopaths, or any other "pathy."

Dr. McCallum moved the following resolution:

"Whereas the Province of Ontario has decreed by section 40 of the Ontario Medical Act that all members of the College of Physicians and Surgeons shall be entitled to practise medicine, surgery and midwifery, and whereas the Province of Ontario by virtue of the same Act requires certain standards of education of all members of the college, the Legislative Committee of the Council of the College of Physicians and Surgeons is hereby instructed to resist all legislation granting membership of this College to any men or body of men who have not fulfilled the requirements of the Act."

This would aim at the osteopaths, and make it necessary that they qualify. He objected to these people posing as qualified in all branches of medicine, when in reality they only knew something about

one branch and often but little of that. He saw many objections to the action of the Legislative Committee in recognizing them.

Dr. E. E. King defended the action of the Legislative Committee. He said the committee had been actuated by a desire to have the "practice of medicine" defined in the act. He contended that the proposal to compel osteopaths to matriculate and attend lectures for four terms of eight months, and take the Council examinations, would protect the public against ignorance. It would compel these practitioners to become educated. He called attention to the British Columbia Act.

Dr. McCollum's motion was voted down and he was added to the Legislative Committee. It was felt by some of the members after the vote had been taken that they had made a mistake by rejecting this motion by 17 to 5.

Dr. McColl, of Belleville, thought that all should take the Council's examinations and felt that the Legislative Committee had not shown enough backbone in dealing with this subject. He thought osteopathy would die out in course of time.

Dr. M. O. Klotz, of Ottawa, pointed out that according to the amendment that had been proposed at last session, a man could go to a college in the States for four sessions and then come here and qualify.

The proposal of the University of Toronto practically to do away with the Medical Council by permitting its graduates to practise without passing the Council examinations was opposed by a number of members. Dr. McCallum favored the idea. Dr. Varden was much opposed to the attitude of the University in this matter. The affair was then dropped.

The Committee on Discipline reported that Dr. George M. Shaw, of the Strandgard Medical Institute, was guilty, but that action be deferred. This was adopted. It was agreed that the name of Albert W. Stinson, of Cobourg, be erased from the register. The committee reported that the case against Dr. Hiram B. Thompson had not been proven. In the case of Dr. B. E. Hawke it was decided that as he was out of reach at present no action be taken. If he ever returned and the court found him guilty, his name would automatically be dropped. It was agreed, however, to take evidence in his case.

Dr. E. E. King submitted the report of the Committee on Redistribution of the membership of the Council. The report was adopted. By this action the membership of the Council will be reduced to fifteen. Ten of these are territorial, three from those universities having teaching medical faculties and two homœopaths. Dr. C. E. Jarvis made an appeal for three of the latter. The report pointed out that the number of doctors practising in the various districts at present was very un-

equal. This ought to be corrected in the rearranging of the districts. The register showed that there are as many as 537 in one district, 313 in another and 59 in a third, and so on.

Dr. R. J. Gibson, of Sault Ste. Marie, and Dr. W. Spankie, of Wolfe Island, were appointed as delegates from the Council to a meeting in Ottawa this Fall to form a Dominion Council. Other nominees were Drs. H. S. Griffin, A. T. Emerson, E. E. King and E. A. Hardy.

On motion of Sir James Grant, a resolution was adopted approving of the work of Dr. T. G. Roddick, ex-M.P., of Montreal, in securing Dominion registration.

The right to practise medicine in Ontario without writing on the Medical Council examinations is claimed by Dr. Young, who is at present residing at Kingston. Dr. Young has a certificate entitling him to practise in the Northwest Territories, and claims that the Dominion Act of 1905, which apportioned part of the territories to Ontario gives him the right to practise medicine in Ontario.

His claim was vigorously disputed at yesterday's session of the Ontario Medical Council. Dr. McColl of Belleville being very emphatic in his opposition. After some discussion it was referred to the Council's solicitor for advice.

Dr. J. S. Hart, of Toronto, called attention to the regulation that students should attend five sessions of eight months duration at college. He said that Queen's University had a session of six months only. He was not sure of the length of the session of the Western University. He made a strong protest against any evasion of the regulation of the Council, and submitted a motion to this effect. After some discussion it was referred to the Education Committee. There was a good deal of feeling manifested during the debate.

Sir James Grant, of Ottawa, urged that every effort should be made to lessen the ravages of tuberculosis. He favored the individual tent system of treatment rather than the sanitarium. He thought that strong drinks were injurious, but that beer and ale were useful to the working classes. He thought the government had done well for consumptives.

Salary increases were granted to a number of officials. The registrar was given an increase of \$250, making the salary \$2,750; the treasurer, an increase of \$100, making his salary \$700; Mr. J. W. O'Connor, of Port Arthur prosecutor for the Council, \$1,200. The auditor of the Council will receive \$75. An allowance of \$20 per diem was voted to each member of the Discipline Committee, and the members of the Council each receive an allowance of \$100 for attendance at the meeting of the Council.

Letters of condolence were ordered to be sent to the relatives of

the late Dr. Lane, of Malorytown, and Dr. George Adams, of Toronto.

Dr. McCallum wanted to know why the treasurer, Dr. H. Wilberforce Aikens, persisted year after year in leaving out the details of the expenditures, which the Council ought to know.

Dr. R. J. Gibson, of Sault Ste. Marie, retiring President of the Council, made special reference to the numerous reforms brought about during the last year, notably the transference of the primary and intermediate examinations to the Universities and the retention by the Council of only the final examination, open to graduates from recognized medical colleges. This had greatly lessened the work of the Executive and Examining Board.

Dr. Edward Ryan, of Kingston, newly-elected President, struck a similar note in a short address. He expressed the hope that the simplification of the examination system would result in a material reduction of the fees exacted from students, which are at present unduly onerous.

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#### THE HOUSE FLY FROM A MEDICAL VIEWPOINT.

The house fly stands convicted as a disseminator of disease and a carrier of contagion. Ever since the investigation of the spread of typhoid fever in the United States military camps during the Spanish War of 1898, the evidence has been accumulating, until to-day there is no escape from the charges against this tantalizing insect, says a writer in *The Journal of the American Medical Association*. Every far-reaching probe into sanitary problems is liable to disclose conditions hitherto quite unsuspected; and the indictments already brought against the house fly during the past few years charge responsibility for a long category of infections, including cholera and various forms of dysentery, diphtheria, erysipelas, contagious ophthalmia, cerebrospinal meningitis, anthrax and possibly small pox, in addition to typhoid fever.

Whether all of these charges will stand in the light of scientific investigation remains to be seen. It is important, not so much in justice to the accused insect as because of the hygienic and preventive measures which are dependent thereon, that the question here raised be authoritatively settled. In the case of typhoid, the evidence appears to be complete.

Dr. Torrey, of the Loomis Laboratory, of New York, has attempted to supply facts on this question. He has examined the flies caught in the densely populated parts of New York City during a number of months. Both the bacteria occurring in the intestine and those from the surface of the insects were investigated. The flies examined in

April and early in June were comparatively free from dangerous bacteria. As the summer season advanced high bacterial counts began to appear and also an abrupt change in the character of the bacteria. The record counts came at the end of the two weeks of excessive heat in July.

Some idea of the number of organisms that a single insect may carry is indicated by the figures 570 to 4,400,000 for the surface contamination, and 16,000 to 28,000,000 for the intestinal bacterial contents. Most of the bacteria found were comparatively harmless. This investigation, however, was carried on in the crowded city, where sewers would naturally carry off all of the most dangerous infective matter. The house fly is an "undesirable citizen" in any event, so that the war of extermination already begun against it in many quarters deserves encouragement and support.

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#### SOME STRANGE CURES FOR WHOOPING COUGH.

Whooping cough, which some mothers think can be cured by taking children near gasworks or through a tunnel, is the subject of more quaint superstitions than almost any other disease. In Northamptonshire it is believed that if a small quantity of hair is cut from the nape of the sick child's neck, rolled in a piece of meat, and given to a dog, the whooping cough will be transferred to the animal. In Cornwall the child is fed with bread and butter which has been passed three times under the belly of a piebald horse. In Lancashire they still tell you that whooping cough will never attack a child that has ridden on a bear.

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#### THE HEALTH OF TORONTO.

There were only 22 cases of typhoid with four deaths, as compared with 35 cases and five deaths in June last year. Tuberculosis alone shows an increase, but this is largely due to the more rigid enforcement of the regulations regarding notification. The figures are as follows:—Births, 891; marriages, 735; deaths, 445. June, 1911—births, 857; marriages, 716; deaths, 473. May, 1912—births, 934; marriages, 447; deaths, 637. Deaths from contagious diseases were:—Scarlet fever, 1; diphtheria, 8; measles, 1; whooping cough, 12; typhoid, 4; tuberculosis, 22. June, 1911—scarlet fever, 4; diphtheria, 11; measles, 16; whooping cough, 1; typhoid, 5; tuberculosis, 24. May, 1912—scarlet fever, 6; diphtheria, 20; measles, 4; whooping cough, 8; typhoid, 2; tuberculosis, 43.

The number of cases of contagious diseases reported to the Medical Health Department were, June, 1912:—Diphtheria, 92; typhoid, 22; scarlet fever, 91; measles, 25; smallpox, 1; tuberculosis, 84; chicken pox, 13; whooping cough, 14. June, 1911—diphtheria, 97; typhoid, 35; scarlet fever, 115; measles, 49; small pox, 0; tuberculosis, 29. May, 1912—diphtheria, 186; typhoid, 9; scarlet fever, 154; measles, 22; small-pox, 3; tuberculosis, 71.

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### AN IMPORTANT JUDGMENT.

The judgment of Judge Garrison of the Supreme Court of New Jersey is a very important one. Some years ago a noted London surgeon had an action brought against him because he found it necessary to do more than had been anticipated before the operation was commenced. The present case of a patient by the name of Harris Bennan was operated on by Dr. Victor Parsonnet. After the operation was begun, the doctor found another enlargement on the opposite side. This he removed.

The patient brought an action against the doctor and recovered a verdict for \$1,000. This was appealed by Dr. Parsonnet, and the Supreme Court Judge reversed the decision of the lower court, and held that a surgeon was justified in doing what would be for the patient's good, though this could not be all foretold when the consent of the patient was secured.

This judgment will go a long way towards settling a difficult question, and one that has always been a source of trouble to the operating surgeon. In the past it has not always been safe for the surgeon to proceed and do more than the patient had given consent to.

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### MEDICAL PREPARATIONS, ETC.

#### THE HAY-FEVER RIDDLE.

Despite the many therapeutic advances of recent years, "what to do for the hay-fever patient" continues to be something of a puzzle. The long-sought specific still eludes us. Nevertheless, the malady is not quite the enigma that it once was. Medication, if still empiric, is not ineffective. The symptoms of the disorder can be controlled or minimized; relief, though temporary in many cases, may be obtained; and for these blessings the afflicted patient and the sympathetic physician may well be thankful.

For use in the treatment of hay fever there is, of course, a long line of so-called available medicaments. One dependable agent which comes naturally to mind in this connection is Adrenalin. Indeed, it is doubtful if any other single medicinal substance has been so largely and successfully employed in the treatment of vasomotor rhinitis. As adapted to the needs of the hay-fever sufferer the product is available in a number of convenient forms, as Adrenalin Chloride Solution, Adrenalin Inhalant, Anesthone Cream, Anesthone Inhalant, Anesthone Tape, etc. The various solutions are used in spraying the nares and pharynx, the cream for snuffing into the nostrils, the tape for packing the nostrils. All cases of hay fever, of course, are not amenable to the same form of treatment. It is a logical presumption, however, that a vast majority of them ought to yield to one or more of the preparations above referred to. The Adrenalin products, as is well known to most physicians, are manufactured by Parke, Davis & Co., who will doubtless be glad to send literature regarding them to any practitioner. Requests for printed matter may be addressed to the company at its offices and laboratories in Walkerville, Ont.

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#### PREPARE THE BABIES FOR HOT WEATHER.

During the month of June it is not a bad plan for the physician to take mental "stock" of the babies under his care, especially such as are bottle-fed, with the general idea of recommending such treatment as will tone up and vitalize those whose nutrition may be below par, so that they may enter the trying summer months in the best possible condition to ward off or withstand the depressing influences of extreme heat or the prostrating effects of the diarrhoeal disorders of the heated term.

Careful attention to feeding is, of course, a *sine qua non* and the details of the infant's nourishment should be carefully investigated and regulated. But this is not all. Many bottle-fed babies are below standard from a hematologic standpoint. The marasmic anemic baby deserves special attention in the way of building up and restoring a circulating fluid which is deficient in red cells and hemoglobin. In the entire *Materia Medica* there can be found no direct hematic quite as suitable for infants and young children as Pepto-Mangan (Gude). In addition to its distinctly pleasant taste, this hemic tonic is entirely devoid of irritant properties and never disturbs the digestion of the most feeble infant. Being free from astringent action, it does not induce constipation. A few weeks' treatment with appropriate doses of Pepto-Mangan very frequently establishes sufficient resisting power to enable the baby to pass through the hot summer without serious trouble, gastro-intestinal or otherwise.