REPORT OF THE
SECOND CONFERENCE

on the

MEDICAL SERVICES IN CANADA

HELD AT
OTTAWA, MARCH 28, 29, 30,
1927

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SECOND CONFERENCE

on the

MEDICAL SERVICES IN CANADA

arranged by the

CANADIAN MEDICAL ASSOCIATION

and held under the patronage of

THE HONOURABLE JAMES H. KING, M.D., M.P.
MINISTER OF HEALTH FOR CANADA

in the

HOUSE OF COMMONS, OTTAWA
on MARCH 28*th*, 29*th*, 30*th*,
1927

ALEXANDER PRIMROSE, C.B., M.B., C.M., F.R.C.S., LL.D., *Chairman*
T. C. ROUTLEY, M.B., *Secretary*

OTTAWA
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1928

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March 28, 1927

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Gunn, Jean	Toronto, Ont.	Canadian Nurses' Association.
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Smellie, Elizabeth	Ottawa, Ont.	Victorian Order of Nurses.

MEDICAL SERVICES IN CANADA

The Second Conference on Medical Services in Canada arranged by the Canadian Medical Association met at Ottawa on March 28, 1927, under the chairmanship of Dr. A. Primrose, C.B., C.M.

The CHAIRMAN: Ladies and gentlemen, if the conference will come to order, I will ask the Hon. Dr. King, Minister of Health for Canada, to address us.

Hon. Dr. J. H. KING: Mr. President, ladies and gentlemen, I can assure you it is very pleasant for me to welcome you to the capital city of Canada, representing as you do the medical profession throughout this fair Dominion of ours. As an old practitioner, one who served in the ranks, I think I can truly state that probably no more important conference will be held in the Dominion of Canada, that is as pertaining to the welfare of its people, than this conference that will be meeting here during the next three days.

Our profession is one that stands, I think, in first place in the minds of the public throughout the civilized world, and should therefore do its best to maintain that place in the public confidence. We all have noticed with interest that conferences of various kinds are being held to-day more frequently and with greater enthusiasm than heretofore, not only pertaining to the medical profession, but in all lines of human activity. We find those who are engaged in industrial life, both employers and employees, through their organizations, meeting in conference to-day. So also with the other professions, comprising the arts and sciences that go to make up our common nationhood; these are grouping themselves into the various activities in which they are engaged. These conferences, we hope, portend the improvement of their own condition, and in that improvement a betterment of conditions that maintain within our nation.

The medical profession has to do primarily and largely with the health of the nation, and, surely, there is no more important subject with regard to our people than community health. Public health formerly was pretty much in the control of the medical profession; the local practioner guarded the public health. Within recent years, however, this subject has come to occupy a more important place in the public mind, and to-day we find community health is a subject that is being specialized; men are training themselves specifically for that class of work, with the result that the profession may at times think they are being side-tracked. If that should be in our minds, my suggestion would be that we as a medical profession give more consideration and attention to the general public health.

In the development of medical science, it has been shown in recent years that preventive medicine is what appeals to the profession, and if properly placed before the public, makes a similar appeal. As a profession we can to-day endorse with assurance certain preventive measures—vaccination for smallpox and diphtheria, innoculation for typhoid, etc., notwithstanding that we find in press and magazine articles that there are some who still maintain an adamantine opposition to preventive measures of that kind; men who are still quoting those who gave their opinion some thirty or forty years ago and arguing that such opinions hold good to-day. I think we will agree that the opinions given at that date were probably well-considered by the authorities of those days. If, however, they were living to-day and had been associated with the work that has gone on since they expressed such opinions, they would probably see the error of

their ways and those opinions would not be so expressed. So in seeking to combat those societies and organizations which are hostile to such well-endorsed modern preventive measures, I think we should bring our literature up-to-date and see that the viewpoint of the men who are to-day in authority on various health and medical matters be properly placed before the public.

I understand, Mr. President, your conference is to consider various subjects relating to the medical profession, its standing in the community, and its relationship within itself. It is not my purpose, and I know it is not your desire, that I address you at any great length. I merely wish, as the Minister of Health of the Dominion, and representing the Government, to convey to you a hearty welcome, coming as you do from all over the Dominion. I trust that during the next few days you will not only have an opportunity of delving into the matters which you have in your minds, but that you will also have that opportunity which I think all good Canadians should make for themselves, of visiting and becoming acquainted with the capital of this great Dominion. You are holding your conference in the buildings of Parliament, and you will have an opportunity of going through these buildings and seeing some of their grandeur and beauty. You will also have an opportunity of visiting the chambers of the House of Commons and the Senate, and there seeing the men whom you have selected to carry on the affairs of government in their places and performing what they think is their proper function in the matter of government.

I wish to thank you, Mr. Chairman, for this opportunity of addressing you briefly.

The CHAIRMAN: It is a great pleasure to have these words of welcome from the Honourable the Minister of Health for Canada, (I am sure it is very gratifying to us, sir, to have such a sympathetic reception from you), and the recognition which Dr. King has given us of the importance of this conference of the medical services in Canada. We represent all the provinces of the Dominion in their various activities, in public health, in medical education, medical licensure, etc., and it is our hope that the proceedings here will be of value in extending and making more efficient the medical services in this country. I am sure, in the name of the conference here assembled, I can congratulate you, sir, on the high standard of public health service in Canada and thank you for the very kind reception you have given us.

I will now call upon the president-elect of the Canadian Medical Association to address the conference, Dr. Starr.

Dr. F. N. G. STARR: Honourable Minister, Mr. Chairman, ladies and gentlemen, I can not tell you, on behalf of the Canadian Medical Association, of the delight it gives me to welcome you here, because this conference is really a child and offspring of the Canadian Medical Association. One of the benefits of the Canadian Medical Association is to encourage good doctors and to make good doctors better, and conferences such as this materially assist in doing so because the better doctors we are, the more interested we are in public affairs, and the better it is for the welfare of the people of Canada. If doctors lead in matters of public health and sanitation, surely the public, in all progressive and civilized communities, will follow. Look at the wonderful improvement for instance in the mortality rates of tuberculosis and of diphtheria; the practical disappearance of smallpox and, I very nearly said, the practical disappearance of typhoid—it has disappeared in most places—and it all helps us to realize, if we travel a bit, what a wonderful country we have as a heritage, because the health problems are so advanced in Canada as compared with many other countries. The co-operation of the various public bodies means a tremendous lot, and is one of the most important things, and co-operation is what this conference stands for.

A glance at the program will show the wide scope of this conference of medical services in Canada under the Honourable the Minister of Health, Dr. King. The problem of medical education is a live one; so also is the nursing problem, health education of the public is a live issue and requires, in some municipalities, a very active campaign to bring it to proper fruition. The conference will later on hear something of the extra-mural lectures which have been given throughout Canada through the Canadian Medical Association, thanks to the munificence of one of the insurance companies.

Let progress and good health be the key-note of our deliberations. I am glad you are here.

ADDRESS BY DR. A. PRIMROSE, C.B., M.B., C.M., F.R.C.S., LL.D.

Dr. PRIMROSE: Under the aegis of the Canadian Medical Association a conference, on the medical services in Canada, was convened in the House of Commons, Ottawa, on December 18, 1924, with the patronage of the Honourable the Minister of Health for Canada. At that meeting, which extended over three days, valuable discussions followed the reading of important papers on various aspects of the public health service, medical education and medical licensure in Canada. Those who took part in the conference came from the various provinces of the Dominion, representing this country from the Atlantic to the Pacific. It was indeed a national representative meeting, in which was fostered a national spirit, exhibiting a keen desire, by combined effort, to further the ideals of national unity and achievement.

Those who attended the conference at Ottawa in 1924 considered that something worth while had been accomplished, and they proceeded to suggest a permanent basis for continuance. In a spirit of appreciation, and in recognition of the splendid co-operation which existed and of the benefits which would accrue to the medical profession and to the public whom they serve in Canada, a resolution was unanimously adopted by the conference expressing the opinion that " arrangements should be completed for its establishment upon a permanent annual basis." After due consideration it was not thought wise to make it an annual event but insistent demands came from all parts of Canada which made it obligatory for the association to act. The council at its meeting in Victoria last June authorized the holding of a second conference at such time as the Executive committee should determine and a large committee was formed representing all the provinces. At a meeting of the Executive Committee in December it was determined to hold a meeting in Ottawa at this date. The members of the committee on the conference were unanimous in their approval and have done all in their power to make the conference a success. Eventually arrangements were completed and we are now convened under the distinguished patronage of the Hon. Dr. King, Minister of Health for Canada, to whose courtesy we owe the privilege of meeting in the House of Commons and the advantage of having the proceedings reported and printed.

The conference does not possess executive powers and yet, possibly because of that very fact, it wields an incalculable amount of influence in moulding opinion upon which executive action may be taken by the various bodies represented. The value of frank discussion, under the conditions which obtain, has long been recognized by similar bodies elsewhere. One might cite the Universities' Conference in Great Britain with Empire-wide representation, or the Universities' Conference of Canada. In the neighbouring republic we have the Annual Conference on Medical Education, Licensure, Hospitals and Public Health, and the Association of American Medical Colleges in which some of our Canadian universities hold membership. All of these bodies give an enormous stimulus to progressive thought and influence while at the same time serving to curb the ill-conceived executive action, which might result from immature consideration or inexperience. In Canada with its extensive territory and sparsely settled population there must necessarily exist a tendency to the most aggravated form of provincialism and local prejudice. There is a real danger of becoming self-centred and narrow. These conditions have been greatly ameliorated by freer intercourse among our people. Transportation facilities by rail, by motor, along our great waterways, and more recently by the air have increased enormously; our people travel more and thus the opportunity for the interchange of ideas is greater than in former years. Advantage has been taken of these increased facilities for travel in the varied activities of Canadian life. The effect may be noted in the progress made in the growth of great industries, in the exploitation of our mineral resources, in agriculture and the development of our fisheries. This progress in material prosperity has produced increased demand for the education of our people, and, as a result, our universities and technical schools have been taxed to the limit of their resources.

The Canadian Medical Association has played its part in this phase of national evolution. It is to-day one of the greatest assets in the possession of the medical profession in Canada. Its growth in recent years has been phenomenal; the annual meeting attended by large numbers is of the greatest value, providing, as it does, an opportunity for the presentation of papers on recent advances made in medicine and for fellowship. The " Journal of the Canadian Medical Association " has attained a high standard and is to-day accorded its place in the first rank of scientific medical literature.

The conference at present in session, dealing as it does with the varied aspects of public service rendered by the medical profession in Canada, constitutes a medium through which the highest standard of efficiency may be reached. The objective in view is to attain a solidarity in the profession in an effort, by combined action, to attain the highest ideals in our fight to preserve the health of the public and to combat disease.

The last achievement of the Canadian Medical Association is the institution of post-graduate instruction by means of lectures, clinics, and demonstrations which are conducted, by men qualified for such work, in all parts of Canada from ocean to ocean.

By these varied activities the Canadian Medical Association is playing a splendid rôle in building up this country a profession which will be capable of serving the Canadian people with efficiency and credit. Indirectly these efforts will produce a national spirit of co-operation, and will foster national pride in our institutions, helping to fulfil in this manner a national ideal which is not restricted to the medical profession but is developing among all classes of progressive Canadian citizenship.

The question might well be asked as to the actual accomplishment of the first conference held in December, 1924. In the first place it was informative. The seventy-three official delegates who attended that conference, representing the different provinces of this Dominion, learned more of the aspirations and ideals, not only of individual members of the profession, but also of the various executive bodies which are geographically widely separated in Canada, than would be possible by correspondence or by casual interview. Participation in the discussions could not fail to have its influence in the development of future policy and in the furtherance of common ideals. A noteworthy feature of the proceedings was the manner in which delegates who differed in opinion stated their views with frankness. We learned to understand the significance of those different points of view which are the inevitable result of diversified local environment and varied perspective. In spite of difference of opinion we were able to arrive at many points of common agreement resulting in a series of resolutions which were

adopted unanimously covering many of the activities of the medical services in Canada. For example a resolution was adopted urging that every legitimate effort be made by the Canadian Medical Association to secure funds to undertake extra-mural post-graduate work in all the provinces of Canada. The discussion on Medical Education which led up to this resolution was carried on by representatives from Nova Scotia, Prince Edward Island, Quebec, Ontario, Manitoba and Alberta. Within a few months the Canadian Medical Association obtained the munificent sum of $30,000 from the Sun Life Assurance Company to carry on this work for one year. This generous grant has been repeated for the current year and we trust it will be continued. The success of this enterprise has been phenomenal: teams of speakers have been sent not only to the larger centres of population but to the most remote parts of the entire country, conveying information to general practitioners regarding the most recent advances in all branches of medical science. This is an accomplishment which appeals to the imagination, it is an ideal program, providing unexcelled opportunity for keeping the medical practitioner continually abreast of the progress made in the scientific treatment of disease. It is difficult to calculate, difficult to overestimate, the benefit derived from these activities by the general public in the treatment of sick folk. From the entire country letters have been received expressing unbounded satisfaction in the practical outcome of our work in this sphere of post-graduate instruction.

Other resolutions were adopted by the conference regarding various aspects of medical service including such subjects as, the length of the course in the medical curriculum, the registration of medical practitioners, the standarization of drugs, the reporting of notifiable diseases, the combatting of venereal diseases, the control of maternal mortality and the study of pre-natal and post-natal diseases. The conference came to common agreement on all these subjects and, without doubt, their conclusions have produced fruit by influencing professional and public opinion and have had their effect in bringing about recent legislation (e.g. the revision of the Ontario Medical Act, and the act regarding drugless practitioners in Ontario); similiarly our federal and provincial bodies, and our teaching faculties in medicine, cannot afford to overlook a situation created by the expression of unanimous opinion in the resolutions passed by the congress.

Public Health

We shall now turn to the consideration of public health: a subject which concerns the very foundation of all our activities as a profession of healing. The ancients considered health of paramount importance. Herophilus (300 B.C.) a Greek philosopher and physician, wrote "that Science and Art have equally nothing to show, that Strength is incapable of effort, Wealth useless and Eloquence powerless if Health be wanting." It is remarkable to consider the extent of scientific progress in those early days, say from the time of Hippocrates (400 B.C.) to that of Galen (130-201 A.D.). The word physician is derived from the Greek word meaning nature, and physicians were thus first styled "naturalists". Aristotle (384-322 B.C.) the son of a physician, was the most outstanding scientist of his day; in his youth he is said "to have a bias for medicine and biology." This remarkable man has made his influence felt all through the ages, more particularly as a naturalist; we cannot illustrate this fact better than by quoting an observation made by Darwin when he compared the accomplishments of Aristotle with those of two famous eighteenth century naturalists. Darwin says: "From quotations I have seen I had a high notion of Aristotle's merits, but I had not the most remote notion what a wonderful man he was. Linnaeus and Cuvier have been my two gods, though in very different ways, but they were mere school boys to old Aristotle."

The scientific achievement of those early days was truly remarkable, and in view of such attainment we are surprised that progress was so slow throughout succeeding centuries. As a fact, after the fall of the Roman Empire, the world was plunged back into a condition of intellectual lethargy and superstition. For many centuries the lamp of science burned low. It was not until the fifteenth and sixteenth centuries that progress again became apparent in the work of such men as Leonardo da Vinci and Vesalius: later came Harvey, and thus the foundations of modern scientific medicine were truly laid. It is of interest and value to trace the influence of superstition both before and after Aristotle, not only because of its effect on medicine in past ages but because superstition is still with us and, among the ignorant to-day, as in the past, it militates against progress.

Andrew Balfour in a recent address on hygiene as a world force has traced the ancient connection between hygiene and religion. "It is instructive (says Balfour) to note that some forms of religion had, and still have, a hygiene basis. Rites of purity and certain forms of exercise are, to this day, closely associated with religious observances. Both Moses and Mahomet were hygienists of no mean order." To those familiar with the Hebrew scriptures the rigid requirements regarding certain hygiene prescriptions are well known. The religion of China or of India was unable to check the ravages of plague and pestilence. Their methods of attack were animated largely by superstition and magic. In holy scripture in the book of Numbers we are told of a pestilence in which fiery serpents were sent among the people and they bit the people: then Moses, employing imitative magic, made a serpent of brass and put it upon a pole "and it came to pass, that if a serpent had bitten a man, when he beheld the serpent of brass he lived." Thus the serpent had power not only to cause pestilence but to cure it. This association of disease with the serpent is evidenced when we study the attributes with which certain deities were endowed and which were symbolised in a variety of ways. Thus the usual symbol of Asclepius was a serpent coiled upon a pole and sacred snakes were kept in his temples. Thus originated the symbol of a serpent coiled on a staff which is to-day retained, as the badge of service, in the medical profession. Apollo is depicted as an archer and to him was attributed the spread of pestilence by the discharge of his arrows. To this association of arrows with disease has been ascribed the modern use of the word "toxines", suggestive of arrow-poison. In the psalms we read of the "pestilence that walketh in darkness" and "the arrow that flieth by day."

In the midst of superstition the contagious nature of plague was recognized as early as the fourth century before Christ, when Thucydides clearly enunciated the doctrine of contagion in his detailed description of the plague of Athens. Marcus Terentius Varro (116-27 B.C.) actually ascribes disease in animals to living organisms beyond the range of human vision. Throughout history the spread of disease has been associated with war and with famine. This has been the case ever since the early records of the Old Testament where we find sword, famine and pestilence in lurid combination. "The eighteenth century in Ireland, even when war was absent, was an unbroken record of famine and typhus, and Ireland was quit of epidemic typhus only when she had so widened her area of supplies as to ensure immunity from famine. For her deliverance from typhus Ireland is beholden to her potatoes, not to her physicians." (Crawfurd.)

In the treatment of scrofula we have the interesting ceremony of the royal touch which was so much in vogue from the eleventh to the end of the eighteenth century. In the fifteenth century Edward IV introduced the custom of presenting the patient with a golden coin "the angel" valued at six shillings and eight pence. This custom has been attributed, not solely to the desire to assist the destitute but in addition to popularize a practice which stamped the royal personage as the Lord's anointed. These angels were so called because of the

figure, on the obverse, of the arch-angel Michael piercing the dragon. They passed as current coin and would appear to have been used in particular for the payment of physicians' fees. One quaint old herbalist has a jibe at physicians regarding the angel when he says that "like Balaam's ass, they will not speak till they have seen an angel." (Crawfurd.) We have stated that the angle was worth six shillings and eight pence. Curiously enough this amount is the legal tariff paid lawyers for letters in England to-day. We have been unable to trace the connection: possibly lawyers in England have been attempting to curry favour with the angels rather than with their legendary associates! The success of the royal touch for King's evil was doubtless due to the fact that the patient was rescued from the drastic treatment prescribed by physicians of the time consisting of strong cathartics, the use of escharotics and irritating medications and plasters, occasionally a poultice consisting of sheep's dung mixed with honey. These treatments were abandoned in favour of the royal touch and the patient got a chance to recover and did recover through the agency of the *vis medicatrix naturae*. As Ambrose Pare was accustomed to put it quaintly at the end of his clinical record of a successful case, "I dressed him and God healed him." The same idea was expressed by a well known surgeon in England, towards the end of last century, who chose as a motto for his book on surgery, "wounds have an insuperable tendency to heal."

Certain men of letters, confessedly destitute of any accurate knowledge of science, and scoffing at its activities, consider the achievements of modern scientific discovery as a form of superstition out-doing that of the middle ages. Witness Bernard Shaw who, after enumerating the workers in varied fields of scientific research, spoke of them as a "host of marvel mongers whose credulity would have dissolved the middle ages in a roar of sceptical merriment." The literary cynic, if he is clever at his job, often affords us infinite amusement.

Many centuries passed before mankind emerged from the thraldom of superstition and magic. It is true the contagious nature of disease and its microbic origin had been suggested two thousand years ago but the mysticism which pervaded human life and action throughout the centuries, prevented accurate reasoning on a rational basis. The present day psychologist would explain away mysticism but Dean Inge tells us that to disparage mysticism is to disparage the devotional life, "prayer is the mystical act *par excellence*." It is, however, not inconsistent with the religious life to "prove all things, hold fast that which is good." Indeed such is the apostolic injunction. It was not until modern times that contagion and the etiological factors in disease were understood.

The rôle played by bacteria in disease, and the study and enunciation of the principles of immunity, constitute the very foundations of modern medicine. The stern facts of scientific discovery have dispelled the mists of superstition and have revolutionized our conception of disease as they have revolutionized many other activities in life. The work of Pasteur, Lister, Koch, Metchnikoff and a host of others in the field of bacteriology and immunity, has paved the way for effective methods which are at present in vogue in the treatment of disease and in enforcing the principles of preventive medicine.

The machinery, as we see it in operation to-day, in the preservation of public health, is adapted to utilize the results of scientific research in the control of disease. From our viewpoint in Canada we find that public health activities are conducted by definite organizations each having its own particular and well-defined field of usefulness. The specific bodies concerned in this important service may be classified as municipal, provincial, federal, and international. Each group forms an essential link, in the chain of co-ordinated effort, which to-day makes it possible to speak of hygiene as " a world force."

The constant movement of individuals about the world to-day is the direct outcome of the increased facilities in transportation in modern times. We not

only have the transient traveller to deal with but, what is much more serious from a health standpoint, the continuous migration of peoples, in larger or smaller groups, to settle permanently in a new country. The latter is of vital importance in Canada. Thus arise problems which are international in character. The federal governments of different countries must co-operate with one another to the mutual advantage of all. In addition to these inter-governmental activities we have the Health Committee of the League of Nations and the International Health Board of the Rockefeller Foundation acting in co-operation or as independent bodies. We took occasion at the last conference to refer, in some detail, to the organization of these two bodies; we mentioned the different departments of work of an international character in which they are engaged. These included the epidemiological service; the standardization of sera, serological tests and biological products; Asiatic cholera; post-war refugee problems, etc. Dr. George Vincent reminds us that "the first European conference to consider health problems was held in 1851. Twelve nations were represented. Quarantine measures against cholera, plague and yellow fever were adopted. At intervals other congresses were called. Finally, in 1902, an International Office of Hygiene was established in Paris." It was only after the great war that an aggressive attack was made against disease, when fourteen countries, under the auspices of the League of Nations, combined to prevent the ravages of plague in Western Europe, by establishing a barrier to stop its onset. The Health Committee of the League of Nations has the direct support of fifty-five nations and the sympathetic co-operation of the United States of America. The intelligence service of the league has its chief centre at Geneva. By means of a grant of $125,000 from the International Health Board of the Rockefeller Foundation, a centre of great importance was established in 1925 at Singapore, collecting systematically information from all the countries of the Far East. It is now proposed to establish a similar centre on the west coast of Africa. By these organizations, reporting through Geneva, the world at large is kept informed of the onset and propagation of epidemic disease, and thus opportunity is afforded to control its spread.

Again largely through the financial support and co-operation of the International Health Board of the Rockefeller Foundation, and under the auspices of the Health Committee of the League of Nations, there has been inaugurated, and in working operation, an interchange of public health personnel between national health administrations. In addition a number of fellowships are awarded to specialists who undertake research work on special problems affecting international public health. Certain of our Canadians have held such fellowships.

The league also organizes commissions on such questions as malaria and tuberculosis, in relation to international problems relating to the control of these diseases. Further the Health Committee co-operates with other branches of the league, for example the commission on the opium traffic.

In addition to work undertaken and financed in co-operation with the League of Nations, the International Health Board of the Rockefeller Foundation has accomplished valuable work independently. Fellowships have been established to carry on research in many parts of the world. Effective work has been accomplished in the study and control of yellow fever, hookworm disease, tuberculosis and malaria. Institutes or schools of hygiene have been established in Brazil, Prague, Warsaw, and more recently in London, England. Schools for the training of specialists have been established by the board at Baltimore and at Harvard. Of great interest to us in Canada is the fact that from the same source funds have been provided to build and endow a school in Toronto. A building has been erected containing extensive laboratory equipment for teaching and research. This will be known as the School of Hygiene in the University of Toronto and will be formally opened next June under the

directorship of Dr. FitzGerald. It is difficult to overestimate the value of such an institute in the interest of public health activities in Canada. Not only is this school intended for the training of specialists but in addition it will be used for the instruction of the general practitioner and of the undergraduate in medicine.

In 1603 an Act was passed in England to control the ravages of plague. Since that date England has been the pioneer among nations in instituting effective legislation for the preservation of public health and for the prevention of disease. Public health legislation in Canada dates back to 1794 when the quarantine act was put on the statute book. This was mainly aimed at the control of cholera, a disease which was rampant among the immigrants of that time. Since then federal, provincial and municipal organizations have been instituted. Canadian activities have not only kept abreast of the first rank of progress, but have not infrequently taken the initiative in contributing to that progress, while, at the same time, dealing with problems presented by peculiarities of local conditions and environment.

Federal organization in Canada on its present basis was inaugurated in 1919 when a health ministry was established with Dr. John Amyot, C.M.G., as deputy minister. Under the first ministry the Dominion Council of Health was formed, and through this channel the activities of the provincial and municipal Boards of Health not only work in harmony in the various provinces, but also with the Federal Department of Health at Ottawa. Numerous other bodies are active in Canada in the interests of public health, such as the Victorian Order of Nurses; the Canadian Social Hygiene Council, waging war against venereal disease, a problem of national and international importance of the first magnitude; the Canadian Red Cross Society; the Ontario Society of Occupational Therapy, and many other organisations of national and local importance.

Dr. Andrew Balfour, the able director of the London School of Hygiene and Tropical Medicine, came from England a few months ago to give an address at Baltimore to commemorate the opening of the new buiding of the School of Hygiene and Public Health in that city. When tracing the progress throughout the world which is to-day constituting hygiene as a world force, Dr. Balfour says: "Canada has in some way more than held its own. For example, I believe the milk supply of Toronto, under the fostering care of Dr. Charles Hastings, will compare favourably with that of any other city." This acknowledgment of the able administration of one of our colleagues is worthy of note, as well as the tribute paid to the high standard of health work done in Canada as a whole.

The proceedings of the Congress at present convened will include, as indicated in the program, the discussion of many problems of public health, local and general, as they affect our Canadian communities.

The activities of the American Society for the Control of Cancer are well-known. The society has now been in operation for ten years. Its main object is to give accurate information to the public regarding cancer, asserting that cancer is a curable disease, if radical and effective treatment were carried out early; urging the necessity of consulting a qualified medical practitioner immediately if suspicious signs and symptoms were present and describing the early indications of cancer. Organised propaganda has been carried on both in the United States and in Canada for the purpose of fighting cancer along these lines. Similar organizations are actively at work in Great Britain.

Under the auspices of this society, a remarkable and an unique symposium was convened at Lake Mohonk, New York state, from September 20 to 24, 1926. The object of the meeting was to "crystalize existing knowledge" regarding the "prevention, diagnosis, cure and relief of suffering from cancer." The purpose was to collect data which would be of great value in maintaining the

active fight against cancer by the society. Some twenty Europeans attended this meeting. There were representatives from England, France, Germany, Switzerland, Denmark, Belgium, Italy and Holland. These were men engaged in special cancer work both in the laboratory and the clinic, and were specialists of the highest order and able to speak with authority and from experience. A similar group of workers were invited, and attended, from the United States and Canada. This unusual aggregation of authority spent four days in discussing cancer from every aspect and every angle. Many important pronouncements were made and finally certain conclusions regarding the etiology, prevention, treatment, and prognosis were unanimously adopted. These conclusions were published in the November number of the "Canadian Medical Association Journal." The papers, which are of great importance, and the discussions will soon be published *in extenso* and will be available for future study.

In Canada we should assist, by every means possible, the work which is undertaken by this and similar societies. There can be no doubt of the fact that cancer patients come much earlier for treatment than was the case before this society became active. Every health organization in Canada should co-operate with those who are striving to bring the cancer patient under the care of a qualified practitioner at an early stage in the disease. The only positive statement we can make, after all the research work which has been carried on, is that cancer is a curable disease if effectively treated at a sufficiently early stage. If we can succeed in our endeavour to bring the patient early enough for treatment we shall undoubtedly lower the mortality from cancer in this country.

Medical Education

The curriculum in medicine demands constant supervision and reconstruction. Our chief objective in the medical school is to train students in a manner that will equip them best as general practitioners. We must make additional provision for the training of the specialist *after* he has completed a sound fundamental course of instruction common to all undergraduates in medicine. In many universities a specialist's course is provided which leads to higher degrees in medicine and surgery.

On graduation in medicine from a university and after receiving his diploma or license, a man is officially pronounced capable of undertaking medical practice in all its intricate ramifications. Fortunately most people know their limitations and refuse to undertake, let us say, a serious major operation when they have not had the training which would qualify them to undertake such responsibilities. We must admit, with regret, that these responsibilities are occasionally assumed by the unqualified with disastrous and even tragic results.

Consider for a moment the status of general surgery as a specialty to-day compared with the conditions which formerly existed. Early in the fourteenth century the Barber surgeons were legally recognised in England, and a few years later the "Guild of Surgeons" was instituted and became a rival of the Barbers. Throughout the greater part of the fifteenth century the Barbers seem to have had control until, in 1540, the two companies were united by Henry VIII. The united company was authorized to appoint four masters or governors, "two to be surgeons and two to be barbers." Barbers were forbidden to perform any surgical operations, except the drawing of teeth, and surgeons were not to exercise the craft of barbery and shaving. From these primitive beginnings, and after various vicissitudes, in 1800 the Royal College of Surgeons in London emerged, which, under a new charter in 1843, changed its name to the Royal College of Surgeons of England.

The teaching of surgery was linked with that of anatomy. This was the earliest association, as quaintly stated in an edict of the Town Council of Edin-

burgh in 1505, which provided that there be handed over "anis in the yeir ane condampnit man after he be deid, to make anatomea of, quairthrow we may heif experience, ilk ane to instruct utheris, and we sall do suffrage for the soule." A similar enactment in England gave the company the right to claim four bodies annually of persons executed for felony.

The first inclusion of surgery in the medical curriculum again illustrated its association with anatomy. In Edinburgh during the first half of the eighteenth century the first Monro gave "a few perfunctory lectures at the tail end of the course in anatomy, the professor himself was not even a practising surgeon." In 1776 Monro secondus successfully opposed an attempt to create a professorship of surgery in Edinburgh. It was not until 1831, after the three Monros in Anatomy had monopolized the university teaching of surgery for 110 years, that the Crown, on the recommendations of the Town Council, established a separate chair of systematic surgery and appointed John William Turner its first incumbent (Miles).

During the past one hundred years surgery has gradually come to occupy a position, on the curriculum of study, of equivalent status to that of other clinical subjects. Fifty years ago the field of surgery began to extend its limits and, because of the genius of Lister and his monumental contribution, to-day there is no region of the body which is delimited from the surgeon's skill. The technique of surgery has become more and more complicated with the result that once more we have specialties within a specialty. Take for example the surgery of the brain and spinal cord, as one of the more recent subsections of surgery. In our large schools we are training men for this very delicate work, and the general surgeon recognizes that, without very special training, he is not competent to operate upon brain tumours, etc., with the skill and efficiency which is due to the patient.

Let us, however, for a moment consider the training of the general surgeon. His services are in demand in all parts of the country and as our hospitals multiply in smaller communities, the general surgeon finds increasing opportunity for work. In the evolution of the modern surgeon it appears essential that the ancient close association with anatomy should be maintained. Fifty years ago Billorth wrote a book on medical education which has recently been translated into English. He had a wonderful vision of the future and his writings are carefully studied, because his sane arguments apply with remarkable acumen to the problems of the present day. Regarding anatomy, Billroth makes this statement: "Surgery and anatomy have many points of contact, but they are not identical; one may be an excellent anatomist, and yet not have one iota of surgical skill." The truth of this pronouncement is apparent to all; but I am sure Billroth would with equal emphasis assert that "Surgical skill is of little practical value in the absence of an accurate knowledge of anatomy." The surgeon who is not a good anatomist is constantly courting disaster. A thorough knowledge of anatomy must be insisted upon as a necessary qualification to practise surgery. Equally important is an adequate training in surgical pathology and bacteriology.

Another requisite for surgery is a good knowledge of general medicine. Thirty years ago it was the custom to insist upon a man conducting a general practice for at least five years before branching off into surgery as a specialty. Theoretically the suggestion is sound and, at the present time, one could cite examples of young men continuing in general practice who, along with their general practice, by hard, conscientious work, have succeeded in acquiring an excellent training in surgery. There is no better product in general surgey to-day. There are certain requisites necessary in such a conjunction of surgery with general practice. The man must do continuous work in a surgical ward of a general hospital and must, over a long period of time, act as first assistant to a good surgeon.

Unfortunately the opportunity to act as assistant and to work, and possibly teach, in a surgical ward and laboratory, can only be obtained in a large city, preferably in a teaching centre. This, therefore, does not solve the problem for the training of surgeons for smaller communities. In some of our schools we have endeavoured to solve this problem. Briefly stated it consists of post-graduate instruction and experience extending over three years. One year as interne, in a rotating service in a general hospital; two years devoted to surgery, acting as first assistant and undertaking operations on his own responsibility while at the same time carrying on work in the laboratories approved by the Department of Surgery. The rotating service, if the man takes full advantage of his opportunities, gives him, in an intensive fashion, something equivalent to the period of general practice which has been recommended. A knowledge of laboratory methods as applied in surgery is particularly valuable to one who is to be cast upon his own resources in a small community and finally two years devoted wholly to surgery in the wards and laboratories of a general hospital will give him an opportunity to develop the necessary confidence and skill to carry on as a specialist. If the individual is proceeding to a higher degree in surgery at the University he will be required to pass examinations in anatomy, physiology, pathology and surgery.

We are told from time to time that bad surgery is done and unnecessary operations are undertaken. The general public will rectify, eventually, that state of affairs where it exists. The public will demand, at present they are demanding, a knowledge of the qualifications of anyone who undertakes to do surgery. In medical education, however, we should take the initiative and anticipate the demand of the general public by providing the machinery by which the general surgeon may be trained to do this special work efficiently.

I need not elaborate this theme of the training of specialists. I have spoken of general surgery but other specialists must be dealt with along similar lines. Post graduate instruction, suitable to each specialty, must be available in medicine, in obstetrics and gynaecology, in ophthalmology and oto-laryngology, etc. The time has gone by when a man, on graduation, is regarded as competent to practise as a specialist. He must be trained and machinery for that training must be provided.

Regarding the curriculum of study in the ordinary undergraduate course in medicine there is much to be said. Twenty years ago standardization and uniformity were the popular ideals. We must acknowledge that insistence upon the attainment of certain minimum standards resulted beneficially in eliminating the lower grade schools. But standardization has served its purpose and the sooner we abandon any idea of uniformity the better for the future progress of medical education. There is a healthy reaction at present in favour of the cultivation of individuality in our medical schools. Healthy criticism is now levelled at rigidity in the curriculum and the consensus of opinion is in favour of greater elasticity.

In this country we are not tied down by tradition; it is easier for us to introduce reforms than is the case in older countries. We are alert to the fact that methods which may have been essential for progress a quarter of a century ago have served their usefulness and should be considered obsolete to-day.

Take the position of the basic sciences of chemistry, physics, anatomy and physiology. These sciences were at one time closely linked with clinical subjects. Thus the Professor of Anatomy at the beginning of last century gave the lectures on surgery; and physiology, formally known as the "Institutes of Medicine," was taught in its direct application to clinical medicine. Then came an interregnum when anatomy and physiology were restricted to the sphere of pure science but as these subjects, because of advance in science in general, became more and more comprehensive and covered a larger and larger field, the demand was made that teaching in these subjects should be restricted and should cover only the ground which had its direct application to the practice of medicine.

To-day the situation is changed. Scientific methods, with equipment consisting of instruments of precision, and laboratory investigations, have been introduced into the clinic; these methods are essential in modern scientific medicine. To attain the best results and to save time and effort, the preliminary teaching in the basic sciences should be restricted to their specific spheres, without any attempt at the clinical application.

It would appear that our progress in the medical curriculum, as in many other human activities, moves in cycles. It becomes apparent that we have arrived back at the stage of teaching these basic sciences as pure science; the object being to inculcate the scientific method, its application comes later. One would in fact advocate to-day the principles laid down by Billroth half a century ago. After deprecating the "premature development of medical routine" he says: "The degree of scientific training and interest imparted to the young man at the University determines his intellectual level for the rest of his life. It enables him to keep in touch with scientific development, and even though the breakers of practical life should for a time carry him away from the green shores of the Promised Land, he will be able, when the sea has subsided, to row himself back again, there to gather refreshment among the newly ripened fruits." Then again his remarks regarding the student in science are apposite: "Whatever he may learn incidentally of the physician's technique through the study of these subjects is, in my opinion, merely a by-product obtainable with little effort." We can hardly improve upon these arguments advanced by Billroth, in stating our present day viewpoint.

The inordinate length of the curriculum of study is due mainly to two factors. First the larger field which must be covered in the study of the basic sciences due to modern progress in science, and secondly the much greater application of the scientific method in the treatment of disease. Hence the necessity for lengthening the time both in the primary and in the final years.

If these arguments are sound then, once more, we may advocate the teaching of the basic sciences in water-tight compartments without any attempt at clinical application. The basic sciences should be taught in such fashion that the student can apply the methods of physiology and anatomy, etc., at the bedside. As Billroth says the application later is acquired "with little effort." The main thing is to see to it that the training in science is sound and adequate.

Our graduate of to-day has not only laid a sound foundation in his training in the basic sciences but having, early in his course, acquired the scientific method, he is able to apply the methods of scientific investigation at the bedside in the elucidations of the problems of disease. Furthermore, as he goes out into practice, he is capable of applying the advances in science in his daily routine of practice.

The product of our present day curriculum is a tremendous asset to the profession of medicine. An individual practitioner may not initiate any particular advance in the treatment of disease, but in virtue of his training in science, he has the necessary receptivity which permits him to understand, and to incorporate in his practice, the discoveries and advances made by others. Elsewhere I have illustrated the importance of this observation by referring to the experience of Lister, the centenary of whose birth we celebrate on April fifth. Lister was himself a trained chemist and biologist, and was able to utilize the discoveries of Pasteur in the enunciation of certain principles in surgical treatment which revolutionized the entire field. Lister's colleagues, leaders of the profession of his day, did not possess the necessary receptivity, their knowledge of scientific methods was meagre and inadequate, they could not understand the language of Lister expressed in scientific parlance and, as is often still the case where ignorance prevails, they bitterly opposed his teaching, with the result that the full fruition of his epoch-making discovery was postponed for a quarter of a century. On the other hand, witness the condition which obtains to-day in the

introduction of Insulin. The profession, trained in science, immediately understood the significance of Banting's discovery; his findings were immediately checked up in the laboratories of scientific investigators elsewhere, and within a few months the entire medical profession was able to utilize, and did utilize insulin in the treatment of diabetes. This argument is sufficient in itself to justify the present system of the training of medical students both in the basic sciences and in their application at the bedside.

Medical Licensure

The possession of a degree in medicine from a Canadian University does not authorize a graduate to practise medicine in this country. He is required to obtain, by examination, a license from one of the various licensing bodies. Each of the nine provinces possesses a board legally qualified to grant such licenses, and, in addition, there is the Medical Council of Canada. This latter body was established in 1912, its purpose being to grant a qualification to practise medicine, acceptable for license in every province of the Dominion. A candidate wishing to take the examinations of the Medical Council of Canada is required to present an "enabling certificate" from the council of his province, indicating that he has fulfilled the requirements which would entitle him to take the examination for license in his respective province. Armed with this enabling certificate, he is eligible to come up for the examination of the Medical Council of Canada. Having passed these examinations "he is entitled to register without further examination, in any province."

The prestige of the Medical Council of Canada is increasing year by year. The last report showed that 1,772 persons were on the register, and of these no less than 275 were enrolled during the past year. The provinces of British Columbia and Saskatchewan have abrogated their right to hold examinations and in lieu of these accept the examinations of the Medical Council of Canada. It would seem, therefore, that the prospect is improving for the attainment of the desirable ideal of having one great central examining and licensing board for all Canada.

There are questions of grave importance which require consideration and which must be satisfactorily disposed of before that ideal is ultimately attained. The rights of the various provinces must be conserved. Standards may vary in respective provinces. But, taking all these facts into consideration, we submit that the central body may function without disturbing the *status quo* in the various provinces. It must be remembered—in fact it is clearly obvious —that the duty of a licensing body is to fix the *minimum* standard which must be attained before a license to practise is granted. This does not in any way interfere with the curriculum of study or the standard set by any teaching body provided the minimum standard required by the central body is attained. In fact it may be assumed that individual schools will more than attain such a standard; they will go far beyond it, and different schools will probably exhibit great diversity in the manner in which they develop their own methods of teaching and their own standards of examination.

A student coming to the university for a course in medicine is not concerned with the requirements of the licensing body. He is attracted to a particular school by the training which is provided there. He may be influenced by other things such as economic consideration, convenience to his home, etc., but the requirements of a licensing board do not influence him in his decision. The reputation of a particular school is founded upon a variety of factors; some of these are elusive when we attempt to define them. Obviously a sound training in medicine is essential if students are to be attracted; the personality,

the attainments, and the teaching ability of individual members of the staff are often determining factors; as also are the adequate provision of clinical and laboratory facilities and the good name which the particular University, as a whole, has acquired for learning and its sound methods of education. Perhaps the greatest asset which a university possesses, and the one which is chiefly responsible for enhancing its reputation, is the final product of its educational system. It is the reputation of our graduates which counts, not only in the success they attain in the practice of their profession, but in their ability to advance the cause of medicine by investigation and research. Furthermore, it is chiefly our younger men who exert this influence. They have had the advantage of a sound scientific training, much more thorough and practical, than their predecessors. Youth and enthusiasm, combined with ability and a good education, obviously constitute to-day the criteria which, in all the activities of life, ensure progress; and incidentally such graduates by their success maintain the reputation of the school from which they receive their degree and within whose walls some of them may still continue to work and teach. Woe betide the school which does not possess this asset of young, well-trained, enthusiastic graduates; the future is largely in their hands to maintain the standards of education and the reputation of their school.

These observations might seem inappropriate in a discussion on licensure but they have, we believe, a definite bearing. In the first place, a "minimum standard" for license is set purely for the protection of the public. It must be sufficiently high; the protection must be adequate; it must ensure that a man is fully qualified to practise his profession with safety to the public. Is it not possible that all provinces could agree on such a minimum standard? Having agreed on this, then the different schools would have individual freedom to evolve their own method of education, assuming of course that it covers (it will no doubt go beyond) the curriculum of study demanded by the minimum standard. Other than that no specific standards should be set, no uniformity, no rigidity of curriculum. Each school would be able to live up to its own ideals. The more individuality developed in our schools the better. Let each be responsible for its own development; let each, of its own initiative, fix whatever standards, whatever requirements, they may see fit. There may be great diversity of opinion regarding many details in the curriculum of study. The one thing in common among our Canadian schools is to produce graduates with the highest qualifications to serve humanity in the treatment of disease. This object may be attained by different avenues of approach. In our great country it is well to have diversity of opinion in educational matters, it keeps us out of the rut of complacency and self-satisfaction, it stimulates healthy controversy and healthy competition. Far from creating divisions, if we approach these questions with an open mind, we cement our common heritage of Canadian citizenship by closer bonds, and we contribute our share of endeavour to foster a national spirit of unity among our Canadian people.

We have stressed the point that this congress is of value to the profession of medicine; let us go farther and emphasize the fact that it is perhaps of still greater value to the public at large. Meeting here under the patronage of the Federal Minister of Health; assembled, as we are, at the seat of Government in Ottawa; we represent the profession of the entire Dominion and our sole object is to raise the standard of the service which we render to our fellow citizens. We hear a great deal about medical legislation nowadays; frequently it is asserted that such legislation is sought in the interests of, and for the protection of the profession. As a fact, the chief, if not the sole, argument for placing a medical act, with all its provisions, upon the statute book is to protect the public and to secure for the public the benefit of obtaining the most efficient treatment which is available in scientific medicine to-day. Thoroughly trained

and fully qualified men, educated in our Canadian universities, largely at the expense of the State, are legally authorized to practise medicine in Canada, and necessary legislation is provided to ensure that the services of these properly qualified individuals are available for the prevention and cure of disease among our people. Legislation is also enacted for the purpose of protecting our people against unqualified persons. The legally qualified practitioners of medicine in Canada are represented here to-day. We are here for the set purpose of increasing our efficiency as servants of the public, we are endeavouring by combined effort to secure the best service attainable for our people; we are endeavouring to improve our methods of education and to restrict the license to practise, to those thoroughly trained and properly qualified. In as far as we succeed in our endeavours, we render an important public service to our country, and enhance its reputation among the nations for progressive thought and action, in a field of public service, at once alluring and humane, the prevention of disease and the relief of suffering.

The CHAIRMAN: I will ask the Deputy Minister of Health, Dr. John Amyot, to address the meeting.

SOME POINTS OF CONTACT—PUBLIC HEALTH AND PROFESSION

Dr. AMYOT (Deputy Minister of Health, Ottawa): Ladies and gentlemen, in my address I am presuming to bring certain of these points before you, some that develop out of the activities of the Federal Department of Health, some out of the provincial and municipal organizations, and some out of the public interest in public health. Necessarily the points cannot be considered exhaustively. Pointing them out I have considered to be sufficient, leaving the inferences to yourselves who, I am sure, have given thought to them also.

Because of the difficulties in the way of public instruction by the administrative health authorities, very active laymen, voluntary health organizations have developed. There is a great field for their work. They look to the medical profession for leadership in their movements. It should not be refused them. There was a time when the general practitioner reached practically the whole population. Our present social conditions have changed. Much of the instruction goes to the public now through these voluntary bodies, supplementing that of highly developed governmental bodies. The object is the same—the prevention of disease, incapacity and misery. Should not our possible aloofness be reappraised?

CLINICS

The profession has given its services always to the care of the needy, whether in the ordinary course of practice or in the organized clinic. You well know the limitations to this clinic service.

It has been found necessary of late years to develop specially equipped diagnostic clinics, especially for the discovery of incipient disease. This movement has been a development partly out of the entry of the layman into the marching forces of preventive medicine. The layman still concedes the leadership to where it belongs. Except in the case of venereal diseases, the public health authorities have not taken to the special treatment centres in this country. Many fraternal societies already attempt medical services. Some insurance companies do and there are big corporations employing many men going to the extent of treating even the families of their employees. Is this practice going to continue growing? Many very influential bodies are advocating it, as there are some wanting to go one step farther and do as in Britain—establish the panel system.

Do We Want State Medicine?

The wealthy can now get hospital treatment and facilities applied and exact knowledge brought to bear on their illnesses as never before in the world's history. The same is available for the poor, but what of that great body—the mid-financially placed? You know the causes of this as well as I. Can they be met?

Amendments to the Food and Drugs Act

During the past week the third reading before the House of amendments proposed to the Food and Drugs Act has been made.

There are a number of amendments, but those that concern us of the medical profession are chiefly as follows:—

Section 1, Subsection 2 (c) of the Act of 1920 reads as follows:—

"drug" includes all medicine for internal or external use for man or animal;

This was deemed not to include those drugs that are for the mitigation or prevention of disease in man or animal, such as antiseptics, antivermin, antipests, sera or vaccines. Therefore, we proposed the following amendment:—

Section 1, Subsection 2 (c): "drug" includes medicine for internal or external use for man or animal; *and any substance or mixture of substances intended to be used for the treatment, mitigation or prevention of disease in man or animal;*

This enables the department to deal with these substances in accordance with the principles of the Food and Drugs Act.

By Section 2, subsection (3), and subsections (*a*), (*b*), (*c*), (*d*), (*e*), (*f*) and subsection 4, we hope to acquire control of the following substances: Strophanthus, digitalis, ergot and other vegetable preparations, pituitrin, thyroid, adrenalin and any other animal tissue preparations, by biological tests and standards; and over sera, viruses, toxins, vaccines and other analogous biological preparations by providing for the inspection of premises, equipment and technical qualifications of the staffs of manufacturers preparing these substances and against in the case of organic compounds of arsenic and other analogous drugs prepared for parenteral medication, by requiring that manufacturers submit test portions of each and every batch of such drugs to be tested in the laboratories of the Department of Health and requiring that only approved batches may be imported, sold, or offered for sale.

These amendments read as follows:—

Section 4 of the said Act is amended by adding thereto the following subsections:—

"(3) Notwithstanding anything contained in subsections one and two of this section, the Governor in Council may make regulations respecting any or all of the drugs mentioned or described in Schedule B to this Act,—

"(*a*) prescribing standards of quality and potency;

"(*b*) defining official methods for biological testing;

"(*c*) providing for the licensing of manufacturers preparing drugs mentioned or described in Parts II and III of Schedule B;

"(*d*) providing for the inspection of premises, equipment and technical qualifications of the staff of manufacturers preparing drugs mentioned or described in Parts II and III of Schedule B;

"(*e*) requiring that manufacturers of drugs mentioned or described in Part IV of Schedule B submit test portions of each and every batch of such drugs to be tested in the laboratories of the Department of Health, and requiring that only approved batches may be imported, sold or offered for sale;

"(*f*) prescribing a tariff of fees for inspection, licensing and biological testing.

"(4) Any drug mentioned or described in Schedule B to this Act shall be deemed to be adulterated if it has not been manufactured, tested and labelled in accordance with regulations made by the Governor in Council under this section, or if it differs in quality or potency from the standard for such drug established by such regulations."

Opium and Narcotic Drug Act

The world has considered narcotism so serious an evil that some seventy-five nations have finally banded themselves together out of the Hague Convention, the treaties after the late war, the League of Nations and the Convention of Geneva of 1925, to combat it. Canada has been marching with this movement.

The Convention of the Hague and that of Geneva have laid down the principles on which the evil can be fought with a hope of success. Now and then opposition is raised against the enforcement of the law. Naturally those in charge of the execution of the law hesitate at times and give thought. Is it worth while? Is it fanaticism at base, all this effort? Is the evil as great as we think it?

Perhaps as good a way as any to make an appraisement of what an evil it is, is to compare it with alcholism. The alcoholic will get drunk once a day, once a week, or once a month. Mentally he is incapacitated whilst drunk. Would you give him your business or trust him with your life or that of the dear ones of your family when in that state? The narcotic addict is in that state 24 hours a day and 365 days a year. He is quieter, but is he more to be trusted—and where is the poor addict to end when his relatives and friends have thrown him out, as finally will happen? The underworld is his end in this world. God Almighty will be as kind with him in the next as His knowledge of the addict's responsibility will appear. We have perhaps eight thousand of them in Canada. Realizing thus the evil, there seems every justification for the law.

Addicts by treatment may be placed in the condition that they can shake themselves from the evil. It is for the psychiatrist or the grace of God to make them realize the pit in which they are and make them will to extricate themselves.

It is the general opinion of the profession that what is known as "ambulatory treatment" is a myth. The patient must be under the strictest, skilled control during the medical treatment, whether one adopts the gradual or the short, sharp withdrawal of the drug of addiction; and more and more the short, sharp withdrawal is being considered the proper method.

The law takes into consideration these two methods, but does not consider that you are justified to go on supplying the drug for the continuance of the addiction just to keep the addict at work or comfortable and, so that complete control might be had during the treatment, prescribes that the drug must not be given to the addict for self-administration. Where a patient is suffering from a disease other than addiction, or a disease in which addiction is a concomitant and part of the disease, the case is left entirely to the honest good judgment of the physician. Practise legitimate medicine and you need not even think of the law. But it is not any more legitmate medicine to continue an addiction than it is to continue giving diphtheria bacilli to a diphtheria patient. Every day of continuance is making the condition worse for the addict when his final cure is his necessity, in spite of what the addict says and protests.

Now you know the difficulties of treatment and how difficult it is to have the necessary control over the patient in his house. This is why it is generally considered that such patients must go to institutions, hospitals, etc. Why should not hospitals treat these cases as they do tuberculosis and venereal diseases. The remedy would seem to be the establishment, under provincial control, of special institutions, psychiatric institutions for their treatment, where the addict could be held for treatment. The difficulty in hospitals is that very thing—they cannot be held. They should be held just as much as an insane patient is held. Do please take this question up with the authorities of your provinces. If all addicts were held there would be no more necessity for this part of the Criminal Code.

This Act is designed for the protection of the public.

With the exception of the French Act, which requires a full statement of medicinal content, it probably goes farther than that of any other country.

It goes without saying, the public has the right to choose and to self administer, within reason, any medicine. Certain people claim the right to invent and to make up certain medicines to be sold to the public. This is partly conceded under our Act, but in the case of any potent drug in the preparation, it must be made public. Under the old Patent Medicine Act, it was not necessary for the applicant for registration to sell, to declare the medicinal composition. Under the present Act, this must be communicated; and, under this Act, if there are any drugs in the preparation named in the Schedule of the Act, then these potent drugs must be declared on the label with their dosage present, and this dosage is subject to modification on the judgment of the Advisory Board functioning under the Act. In this way we have an Act which is nearly as stringent as the French law, in that all potent drug present must be declared with dosage. The lesser drugs are not required to be named nor are the compounding methods and materials declared. The maximum of protection by way of information is given to the public and a large measure of protection is given the patent medicine maker in the field of commerce.

There are certain other striking and restricting limitations in the Act for the protection of the public, i.e.:—

1. No patent medicine is allowed to contain cocaine for either internal or external use;
2. No patent medicine is allowed to contain opium or its derivatives for internal use;
3. No patent medicine is allowed to contain alcohol in greater quantity than 2½ per cent, unless it is so medicated that it cannot be used as a beverage;
4. All abortifacients are barred;
5. All preparations for the treatment of venereal disease and impotency are also barred;
6. No preparation is to be advertised as a cure, and all advertisement making exaggerating claims or statements is forbidden;
7. No registration is given to preparations requiring skilled supervision in their administration, i.e., organotherapy; and
8. No registration is given for medicines designed for the treatment of diseases that, because of their gravity, necessitate early treatment, such as tuberculosis, cancer, diabetes, Bright's disease, etc.

From the above, you will see that the Act has teeth in it. We do not prosecute very much. We do not need to as the registration may be annually reviewed and licenses are good for one year only.

The CHAIRMAN: I thank the Deputy Minister, Dr. Amyot, for his excellent contribution regarding proposed improved legislation, etc.

We would like to have two committees appointed—one a Program Committee, which will consider any suggestions as to bringing up new matters for discussion other than those on the program, and the other a Resolution Committee—on a previous occasion this was found of value, as resolutions were referred to such committee. I should be glad to nominate these committees and report at the afternoon's session. Will some one move and second a motion that these committees be nominated by the chair?

Dr. S. W. PROWSE: I move that motion.

Dr. J. W. S. MCCULLOUGH: I second the motion.

Motion agreed to.

MONDAY AFTERNOON SITTING

The conference resumed at 2 p.m., with Dr. Primrose in the chair.

The CHAIRMAN: Before proceeding with the subjects to be discussed, I want to announce the personnel of the two committees, which you agreed to this morning.

Program Committee.—Chairman, Dr. W. H. Hattie; Drs. E. J. G. Kennedy, L. Gerin-Lajoie, D. S. McKay, James Miller, J. J. Ower, H. H. Murphy, A. MacG. Young, A. Lessard.

Resolutions Committee.—Chairman, Dr. John S. Poole; Drs. C. D. Parfitt, J. G. MacDougall, J. E. Belanger, Murray MacLaren, M. M. Seymour, M. V. Lamb, H. H. Murphy, L. J. Austin, E. Stanley Ryerson.

The chairman of each of these committees will convene his committee when he sees fit. With regard to the Program Committee, the object is to provide that if any member of the conference has any subject which he wishes discussed at this conference, he should communicate with the chairman of that committee. Later on when we have any resolutions to deal with, we will refer them to the Resolutions Committee.

The program this afternoon is on

MEDICAL LICENSURE

and I shall ask Dr. Murphy, of Kamloops, to introduce the subject for discussion.

Dr. H. H. MURPHY (Kamloops, B.C.): To present before this conference for its consideration—a gathering representative as it is of every phase of medical activity in Canada—the subject of medical licensure, a subject in which I myself am vitally interested, is both a privilege and a responsibility. The subject is a vital one, linked up as it is not only with the well-being of our profession, but affecting as it does the health and well-being of every citizen in this vast Dominion.

The President of the Canadian Medical Association said that the object of this conference was to make good doctors and to make good doctors better. It seems to me there is nothing that can be as vital a factor in achieving that ideal as a careful consideration of the question before us, presented in such a way that it will be without bias and leaving open as many avenues of approach for discussion as is possible, so that the best judgment of the ablest minds in this gathering can be expressed fully. The whole afternoon is to be given over to this subject—the presenting of certain problems and difficulties in our profession and the seeking of a solution. Many of those problems are necessarily of an evolutionary character and their solution also must partake of an evolutionary character. They are problems whose consideration requires careful discrimination in order to know those which call for an immediate solution, and those which we must leave over and trust to the element of time and development to play their part in the solution.

The discussion of this important subject has I think been wisely arranged by the Program Committee. It is to be opened by Dr. Young, of Saskatoon, member of the Medical Council of Canada and a past president of that body, whom we in the West claim as peculiarly our own, notwithstanding that his time is now largely spent in Ottawa as one of our Dominion legislators. Dr. Young has been active for many years in provincial work, both medical and political, and we will all value his advice. Dr. MacCallum, who presented a

paper on this subject at the First Conference of Medical Services in 1924, will also take part in the discussion. I understand, also, although his name does not appear on the program, that a further discussion will be presented by Dr. Meakins, of Montreal. I hope that the first two, Dr. Young and Dr. MacCallum, will deal especially with the problems incident to registration under the Medical Council of Canada. I believe they are both eminently qualified to discuss that phase of the question. I hope that Dr. Meakins, who is eminent in academic work on the continent and international in reputation, will deal with the subject as it affects academic training from matriculation to graduation and post-graduate instruction, which only one in his position can do.

Our chairman this morning referred to the old connection between theology and medicine—or hygiene as he called it. This has often been pointed out, and I refer to it to-day only in so far as it perhaps justifies me in doing what I want to do, that is, after the ministerial custom, choosing a text for my remarks—a text which you will not find in Holy Writ but in that vast accumulated knowledge of the race which finds its expression in proverbs: "He who fears new remedies, must abide old evils." If we look across Canadian life to-day, what evidence have we that all is not well with our own profession, that there is need for a revision of the system of licenses? I will divide that evidence under two heads—lay and professional. As lay evidence I would submit the following to you:

After the establishment of the Workmen's Compensation Act in British Columbia, the British Columbia Medical Association decided that the time had come to lay down certain fundamental principles regarding contract practice, which is such a big factor in our work in that province. Guided by the fact that under the Compensation Act this work was thrown open to all members of the profession, the British Columbia Medical Association, with the approval of its members, announced that as an ideal that contract work should be open to the whole profession. What answer did capital make? It said, no; the mere possession of a medical degree and license to practise in this province is not sufficient for us; we must have evidence that the man is qualified, both in medicine and in surgery, to actually do the things that he will be called upon to do under our contract. We must also have a guarantee of his personal integrity. We will not have dealings with the whole medical profession of the province; we will pick our men. We will select men who are members of your Association; we will be glad of your approval of our selection—but no further.

In the next place, to pass from one province to another, as evidence of the lay interest in licensing and in disciplining, if I may use the word as applied to the medical profession—to pass to the province of Alberta where the Medical Profession Act was introduced last year. This Act was to have come before the House last session but did not and in correspondence with the Secretary of the Alberta Medical Association, I understand that it is to be presented this year. Some claim that it is directed at the legal profession, others claim that it is directed at the medical profession. It is known as "The Professional Discipline Act." I will not read the whole Act, but merely certain extracts embodied in a pamphlet which the Alberta Association has published, in order to bring to the attention of those present the serious character of this proposed legislation.

You will note in reading the Act, that the following points stand out in bold relief:—

1. The Cabinet of the local legislature appoints the board, decides of how many it shall be composed, and who are the individual members. The matter is dealt with behind closed doors.

2. The appeal from the Discipline Committees of the various professions is to this board.

3. Where any professional Act provides that the member disciplined can now appeal to the Courts for another hearing, that right is taken away.

4. Where any professional Act does not provide, that the member disciplined may be prohibited from practising his profession, this new Board has the power to thus prohibit him.

5. This new board is given the powers to commence an investigation, against any member of any profession, and punish as it sees fit, without any reference to the governing body of that particular profession.

6. The new board of its own volition, may reopen any charge, against any member, after he has been disciplined by his own profession, and do as it pleases even to depriving him of his rights under his license.

7. The new board's decisions are final, like the laws of the Medes and Persians, and cannot be amended, altered, modified, or set aside by any court of the land.

8. When investigating or trying members of any profession, the board may if it chooses call a member of the profession under consideration, to sit as assessor, but if it does not so choose, it cannot be compelled to.

9. When once a man has been prohibited from practising his profession he cannot be reinstated without the board's consent.

10. The new board makes its own regulations subject to the consent of the cabinet, and the profession must be governed by such rules, to which it has been no party, and has no appeal to any court in the matter.

11. The Provincial Cabinet in secret session has power to make regulations defining:
(*a*) Unprofessional conduct.
(*b*) Fitness of a professional man.
(*c*) Basis of tests of fitness of any professional man.
(*d*) Basis under which any unqualified man may violate any act governing any profession.

12. These Cabinet regulations passed behind closed doors, are valid as soon as passed, but must be reported to the next meeting of the legislature. They remain in operation unless the legislature chooses to alter them.

13. All professions do not have to come under the Act, automatically, just those the Government chooses to put under the Act.

I hear some members say that has not become law; I hear someone else prophesy it never will. The first is true and I hope the second is. But it is an indication that there is a feeling in Alberta in lay circles that some further supervision of the medical profession is necessary. It is an indication that if we do not undertake to solve the problem for ourselves, there may be a solution given to us which will not be to our liking. In the next place I would just like to call to mind that any one who has sat at a meeting of the lay directors of a hospital, hearing for the first time an outline of what standardization really means in controlling the character of medical work done in our hospitals, cannot fail to have been impressed by the fact that they are eager and anxious for it; anxious to assist the medical profession in disciplining itself or, if you wish it, that discipline of ourselves be not entirely overlooked by our profession. And lastly, to come further east, and as evidence of lay interest in the subject, an editorial appeared in the Toronto *Saturday Night* about two months ago discussing the question of standardization of our hospitals by the American College of Surgeons, and to summarize the concluding paragraph, it was that no hospital having regard to its reputation could admit to practise within its walls all members of the medical profession.

In the next place, what evidence have we, from a professional point of view, calling for a revision of our method of licensure? I will only refer in passing to that vast amount of inarticulate accumulation of evidence that is possessed by the profession individually and as a whole of unethical and unjustifiable conduct by many members who are licensed by one or more of the provincial boards and graduates of recognized universities.

Then I will refer to the man we all know, who has not absorbed one new idea since graduating. He may be a community builder, a popular man in the community, but his interest does not lie in the medical profession, and nothing short of a periodical revision of licenses would ever make that man safe for democracy.

At more length I wish to refer to the standardization of our hospitals by the American College of Surgeons. I am not one who is critical of that organization or the work they are doing. They came into Canada at the request of the medical profession and are doing the work we asked them to do. We may be critical of the thoroughness with which they are doing it; we may feel that there are better ways of doing it. If there are it seems to me our duty and obligation is to form our own organization, take over the work and do it better. But the fact remains that it is being done, and personally I think the aims of that organization may be summed up in a quotation from Dr. Malcolm McEachern. He said: "Why do hospitals admit fee-splitting surgeons or those practising methods generally regarded by the profession as unethical, unsound, unscientific, and commercial? These practices are not considered compatible in the care of sick human beings. We must eliminate the irregulars, the unethical, and the commercial elements from our hospitals to-day."

If that is the avowed object of that organization, and it is a very worthy object, can we as a profession join hands with them in assisting in this work, and still leave these men, who may be dropped from the medical staffs of various hospitals, to continue in private practice? Can we say publicly that these men are not qualified, not well enough educated, to work under supervision? Are we justified as a body in saying that they may work without supervision? It is an inconsistency. It sounds like "Alice in Wonderland." If all is well in our profession, if there is no need of changes in our system of medical licensure, why did the Committee on Education of the Canadian Medical Association bring in the following report at its meeting in Victoria?

"Probably in no previous year has the Association's Standing Committee on Education been confronted with a wider field from which to glean its annual report. With two portions of this field the association is so directly and vitally interested that special committees have been at work upon them during the year, and the work accomplished will no doubt be detailed in the reports of these committees in such a manner as to render more than a passing reference to them unnecessary at this time. These are the post-graduate work and the work of the committee in connection with the Royal College of Surgeons of England.

"This second educational activity of the association which has been in the hands of a special committee whose report will be laid before you by Dr. Primrose, concerns negotiations with the Royal College of Surgeons of England, to facilitate the gaining of the qualification by the general profession without the expense incident to the journey to and a prolonged sojourn in Great Britain, expenses which, at the present time, undoubtedly constitute the chief reason why the medical profession in Canada numbers so few fellows of the grand old college. That the efforts of the committee referred to may be successful is a consummation devoutly to be hoped for by all who have at heart the highest interests of Canadian surgery; yet merely rendering the English fellowship more easily attainable by Canadian surgeons will not of itself immediately rid the profession of a reproach, nor the Canadian public of a danger under which both are labouring in a constantly increasing measure.

"The reproach and danger respectively lie in the fact that neither by parliamentary enactment, licensing by-law, or popular tradition, does there exist in Canada any distinction between the general practitioner, the consulting physician or the consulting and operating surgical specialist. In this respect, as in so many others, time and its traditions have in Great Britain effected very real, and in the main, pretty just distinctions not only in the professional mind, but as well in the mind of the people at large, who stand to gain or lose most by the presence or absence of such distinctions. In Canada, time might be relied upon to bring about a similar attitude both of the profession and of the public, but traditions are slow of growth and your committee feel that in these days, when both the science and art of surgery are developing at a pace hitherto undreamed of, a real need exists for a discriminatory registration of the consulting internist and of the consulting and operating surgeon. Such discrimination under our existing machinery would probably have to lie with the various licensing bodies, provincial and Dominion. If those bodies have not the necessary powers at present, the same should be sought by appropriate legislation, and while some opposition would probably be encountered, as in the case of every great reform, yet a recommendation along these lines from our National Association would not, we believe, be lightly set aside by any legislative body in Canada. If the F.R.C.S. of England becomes as easy of attainment by the Canadian as by the English, Scotch or Irish surgeon, our case will be so much the stronger, though even in

that case, the fellowship need not be the sole qualification of a surgical specialty. Some of our universities are already making a real effort to place a distinguishng mark upon the surgeon of training and experience in the form of a Master's or other degree in surgery, and if only the requirements for these degrees are kept sufficiently high, the object aimed at may be attained even should the negotiations with the Royal College of Surgeons of England unfortunately prove abortive. The argument in favour of the action suggested needs no labouring in this report. There is probably no member of this association who does not know of lives being endangered or lost through the essaying of major surgical operations by practitioners who, though legally qualified under our present licensing laws, nevertheless for lack of special training and of surgical experience, are absolutely and fundamentally incompetent in matters of surgical diagnosis and treatment."

Seventeen years ago, a professor in one of the A1 American schools, spoke most disparagingly of the practical training of recent graduates. To-day he is an emeritus professor. I wrote to him recently asking him what changes had been made in the medical schools with which he was identified, and his reply is as follows:—

"As to an undergraduate course in actual operative technique, such work is given, and has been for a good many years in both of those schools, and what is true of them is true equally, with perhaps insignificant variations one way or the other, of all schools with the same ranking.

"The instruction consists in the opportunities afforded to men in the senior class, who in small groups are required to attend so-called ward classes. The students in turn are required to take part in assisting at major operations. In so doing they inevitably must acquire practice in aseptic technique in the first place—in the preparation of themselves and the patient, and the field of operation, for the operative procedure. Then of course they see the steps of the operation, rendering such assistance as may be required of them. They act as second assistants at major operations, the interne or the operator's official assistant only out-ranking them. They learn the steps and methods of drainage where necessary, the closure of wounds and the dressing of them. Some minor operations, such as circumcisions, etc., are done by students under the surveillance of an instructor or assistant connected with the institution."

Our teaching schools have recognized the need of training in the practical craftsmanship of the guild, and much has been accomplished, but much remains still to be done. Contrast, for the sake of illustration, the practical training in his work which is given to the dentist during his undergraduate days, and I will quote you here from another letter received from the ex-Dean of one of our large dental schools: —

"In accordance with the standard curriculum of dental schools in the United States, students begin clinical practice in the infirmary in the junior year. Their practice in the infirmary includes the care and treatment of all classes of cases that come to the infirmary for dental service; this covers all classes of pathological cases beside the operative treatment for dental caries and the restoration of teeth or parts of teeth that have been lost from any cause whatsoever. It includes also the whole range of prosthetic treatment included within the usual limits of dental service. Under these conditions you will see that students in dentistry in American dental schools before they graduate have had beside their theoretical training, two years of practically continuous training in all branches of dental service."

and, gentlemen, as I have just said, a medical student if fortunate may be allowed to do a circumcision.

Now, the advances have not merely been in undergraduate training—I trust that very soon the reproach to our profession that was uttered recently by a prominent surgeon will soon cease to be true. He said, as you will remember, that as far as manual dexterity was concerned, the average man doing surgery to-day was less efficiently trained than the average shoemaker. Those responsible for medical education have not stopped with the undergraduate. Ample provision is now available for postgraduate training. In England in 1922 the general medical council reviewed the regulations of the oldest diploma—that of public health—requiring two years instead of one year interval between graduation and part II of this examination. There are diplomas now in psychological medicine, in tropical medicine and hygiene,

in ophthalmic medicine and surgery, in laryngology and otology, and since the war the Universities of Liverpool and Cambridge have given diplomas in radiology.

In 1923, the House of Delegates of the American Medical Association endorsed certain principles regarding postgraduate instruction. These covered admission requirements, records and supervision of work done, grading of instruction offered, character of teachers, laboratory equipment, library and museum facilities, character of hospital and dispensary services and the issuing of diplomas and certificates. In a general way they approve of postgraduate courses lasting from two to three years and issue a list of sixty-seven approved graduate medical schools in the United States, England, Scotland, France, Germany and Austria, where courses up to their standard can be secured.

In view of these tremendous advances. gentlemen, in medical education, must we not as a profession frankly face the situation and revise our method of medical licensure. How many medical licensing boards are there in this country who conduct a practical examination in actual operative dexterity and technique? Before a man is given a license as a general practitioner should he not be called upon to demonstrate his ability to safely do the surgery of emergency which may at any time be part of the daily work of the general practitioner—and if a man spends three years in preparing himself for the practice of a specialty, should our licensing system not recognize his training and qualifications in some special way?

These are our difficulties in the question of medical practice—what is the cure? I believe it lies in materializing the ideal of those who founded and are conducting the Medical Council of Canada to make it the one portal of entry to medical practice in Canada—and again I quote from the report of the Educational Committee of the Canadian Medical Association, "This committee greets with pleasure the steps that are gradually being taken to unify the licensing examinations in Canada through the Medical Council of Canada." The difficulties in the situation are at once evident. By the terms of Confederation each province has control over education. Before the Act to establish the Medical Council of Canada could come into force it had to be assented to by every province and there is provision to-day for any province to withdraw on due notice. Each province with its own licensing machinery, and back of that the old bogey of provincial rights which has been a bone of political contention in Canada and has been such a potent factor in preventing our unification and national development. Instead of thinking nationally and developing in so doing a national consciousness, we are still thinking in terms of our geographical position—east and west, or even more narrowly still in terms of our provincial boundaries. I would remind you here of that vision of Canada in Peter Ottawa, written by E. W. Thompson:—

> "French, English, Irish, Scotch, he reconciles—
> Boasts them awhile and with his boasting smiles—
> 'That's me—that's Canada—a fourfold flame—
> Of mighty origin surround this name—
> Lives there a man in all this world to-day
> Can wish one pioneering race away?
> His heart's an immigrant—I say no more;
> We chide no stranger entering at our door
> But bid him welcome—bid him share the meal—
> His children yet the native sense may feel.
> And what care we if twenty nations blend
> In blood that flows Canadian at the end.'"

There is a Canadian ideal—and I would that this Conference of the Medical Services of Canada could throw the torch of understanding not only to our own profession but to every citizen of Canada. Can we not, Mr. President, appoint from our conference a committee to co-operate with the Committee on Legislation of the Canadian Medical Association to study the medical Acts of the various provinces—to seek the co-operation of the various provincial licensing bodies—and so to prepare the way for the Dominion Council to assume its rightful place in national Canadian medicine.

And, lastly, gentlemen—we have the question of discipline in our own profession. Powers of discipline are entirely outside the Dominion medical Act. It is to-day wholly a provincial matter. At first sight it may seem that this is not a vital question, but I venture to state that it is a most important factor. So long as we are practising individually without any provincial or national organization, we may, perhaps, be excused if we take the position that we are not our brother's keeper—but to-day with our profession fully organized provincially and nationally, we must have some control over our members, and power of that character should be vested in a national body. The very existence of a national body with power of discipline would, I feel sure, do much towards eliminating irregular and unethical practice. In British Columbia the legal profession recognized this some time ago and if to-day you receive a bill from your lawyer which you consider unfair you can submit it to the Bencher Society for their appraisal—and if a question of unprofessional conduct arises in the legal profession, the question is decided by the Bencher Society. The individual has the right to appeal and this appeal is heard again by their own society and three judges who are present as guests of the society. Contrast with this method of discipline where all the power is vested in their own organization, the method of the College of Physicians and Surgeons where the individual can appeal twice to the courts of the land—with all its attendant dangers.

In conclusion, Mr. President, I see here no evidence of decadence in our profession. These problems, these abuses I have mentioned are, I take it, evidence of growth—evidence of life and vitality and as such capable of correction. In pointing out the shortcomings of our present Dominion Medical Council Act, I do so in no unkindly way. As a profession we are deeply indebted to Sir Thos. Roddick and to the present President, Dr. Powell—to all who have worked in the past to materialize the ideal of a united medical Canada—that the ideal has not been fully materalized they will admit and will welcome assistance from this conference. By the same token any discussion of academic training is not in any unfriendly way. Those who are directing the medical schools of Canada realize that they too have far to go before realizing the medical school of their dreams. They too will welcome constructive, helpful criticism from this gathering.

Last year we witnessed the anniversary of the birth of St. Francis Assissi and there is one story told of him which I feel applies to our profession. He was stopped on one occasion by a peasant who said to him, "Art thou brother Francis?" Being answered in the affirmative, the peasant said, "Thy people lay great store by thee and I admonish thee to be the man they think thou art."

The CHAIRMAN: Dr. Murphy's address has been a very thoughful and practical one. I think I am right in saying that Dr. Murphy is not a member of any provincial licensing body or university staff; yet he has given us a picture, which, I think, is complete. He has established certain premises which are correct, and, unquestionably, we have here a case to be dealt with by our profession. After this splendid introduction of one of the most important problems with which we have to deal, I will ask Dr. Young of Saskatoon to open the discussion.

Dr. A. MACG. YOUNG (Saskatoon): It is not my intention to take up very much time in discussing this matter; not because it is not important, but because I think it is one in which every person here should be given an opportunity to take some part.

I want to compliment Dr. Murphy upon his introduction of this subject. I was more or less impressed, however, with the idea that he was laying before us something which was not exactly medical licensure, but those things leading up to licensure; that is to say, I think he was dealing a great deal more with the product, and how that is obtained, than of what takes place after the product has left the schools.

One of the things I would state at the beginning is that the Medical Council of Canada has nothing whatever to do with licensure; that it is not a licensing body, but simply and solely an examining body.

Now, about the product as we have had it outlined by Dr. Murphy. He had a great deal to say concerning the students going through the schools. We recognize that it is this product with which the officials of the licensing bodies have to deal, and that on the school depends entirely the quality of that product. Those who finally grant licensure have simply to examine and license or in many cases merely license. They do not teach.

Before I pass on, I want to say this—it may sound a bit harsh, but I hope it is not unfair—that I do not believe the schools to-day pay sufficient attention to the ethical side of the training of medical students. I myself am a graduate of a school of which I am very proud, but I do not think that sufficient stress was placed upon the ethical side of our education. From time to time I have to deal with men both as to registration and sometimes afterwards as to discipline, and I am astounded on occasions to find the ideals which some graduates have when they come to practise their profession. As an example, the first question I had asked me by one young chap after getting his license was just how far could he go in a certain line before he would be considered a criminal. That may be more or less unique; all do not ask that, but certainly the question of monetary return appears to have a much larger place in the minds of some men than in my humble judgment it should. Personally, I believe strongly that before a man is accepted as a medical student, he should not only be examined as to his preliminary educational training, but also as to whether he is a fit and proper person to take up the study of medicine.

We have in Canada three methods whereby a man may become licensed. The first is by the provincial organization—whether the College of Physicians and Surgeons or the Provincial Medical Board, as it may happen to be called. In some cases the council conducts its own examinations or as a modification there are conjoint boards between the schools and the councils. After passing the examination the graduates may be licensed.

A second method is that of being licensed through British reciprocity. All the provinces of Canada have not had British reciprocal relationship, British Columbia, for example; but most of the other provinces at one time or other have had reciprocity with Great Britain. Some provinces found that this agreement as it worked out in practice was not conducive to the best interests of the province and it has been terminated. In the province of Saskatchewan some time during the war we were asked to pass legislation in order that we might come under a reciprocal agreement with Great Britain. This we did. Having made that arrangement, we found later that Great Britain could go ahead and make any reciprocal arrangement she decided with France, Germany, Belgium, Italy, Japan—in fact, with any other country, and we found that registrants from such countries as well as from Great Britain, were entitled to be registered in the province of Saskatchewan, without examination.

We found another difficulty. We found that students from our Canadian universities could send $25 over to Great Britain and with the certificate with which they were furnished, they could come to Saskatchewan and demand registration. They took away from Saskatchewan any right or any say in anything pertaining to medical education, preliminary or otherwise. We felt that this method of registration was not in the best interests of Saskatchewan,

or Canada as a whole, and after a good deal of negotiation with Great Britain, this arrangement has finally been abrogated. We are not opposed to reciprocity with Great Britain, but we are opposed to reciprocity on the basis we had it before.

The Medical Council of Canada grants after examination a certificate, the L.M.C.C. With this one may go to any province and become registered, but there are three things necessary before you can get that certificate. The first is you must have a degree from a recognized medical school. The next is an enabling certificate from some Registrar in Canada before you are permitted to go up and take the examination, and thirdly the examination must be passed. I wish to say a word or two about some of our difficulties in regard to enabling certificates. As you know, the Medical Council of Canada has no right whatever to say what any man's preliminary educational training will be—that is distinctly for each province. Under the British North America Act, education is left to the provinces and cannot be disturbed by the Medical Council of Canada. A graduate must get an enabling certificate from some provincial registrar. Now, it has been agreed that enabling certificates will not be given by any Registrar except to students who are domiciled in that province in which he is the Registrar. That has been agreed upon and so far it has worked out reasonably well, but we have some difficulties. I may cite the case of a man from one province, domiciled there, complying with the preliminary educational requirements, got his certificate of L.M.C.C., and he presented that certificate to another province and registration was refused. Now I understand that with those who have been sitting on the Medical Council of Canada, there is no difference of opinion, but unfortunately when we go back to our various provinces there does seem to be some friction. Every province has a right to conduct its own affairs as it sees fit. Unfortunately the Registrar of one province, has attempted to dictate to other provinces in matters entirely beyond his control. Between the provincial councils, and their Registrars, there must be a complete understanding if friction is to be avoided.

What is the object of licensure? If I understand it correctly, it is this—that we establish some method of satisfactorily passing on the qualifications of medical graduates, so that we can say to the public that this man is a reasonably safe man to go out and practise his medical profession anywhere in Canada. We are not, as a body, at the present time concerned with higher degrees, no matter how important they are. I believe they are very important but examinations for medical licensure are not the medium, in my humble judgment, by which higher degrees should be granted. I am not saying a word against higher degrees. There has been a feeling for some time that the Medical Council of Canada might conduct an examination which would grant a man higher recognition, but not necessarily for licensure. That may come in time, but I want you to get clear in your mind the difference between licensure and the higher degree. It may be all very well to say the public has a right to demand of us to say whether this or that man is qualified in surgery, this man in medicine, this man in eye, nose and throat. If we say that the man is reasonably well qualified in the science and art of healing, I think we will have to leave the rest to the discrimination of those who are going to employ his services. I would not like any one here to feel that in the slightest degree I am more or less ignoring the suggestion of Dr. Murphy with respect to the higher degree. I think it is a subject which is of great interest, not only to the medical profession as a whole but also to the public, but I do want to draw a distinction between the two things. The one thing to find is whether or not a man, after he has graduated, is a reasonably safe man to trust with patients.

Coming now to discipline, Dr. Murphy suggested that the Medical Council of Canada should be a disciplinary body. It is merely an examining body.

I do not believe it should become a disciplinary body. It seems to me that the local College of Physicians and Surgeons itself is much more competent to deal with those requiring discipline. To transfer that branch to the Dominion body would not meet at all with my notion of what would bring efficiency.

After all is said and done, what is discipline for? Two things: First, for our own protection we must keep our skirts clean; secondly, or, perhaps, primarily, those skirts must be kept clean in the interests of the public.

Let me say a word or two about discipline, for I have noticed since I came here that this question has come up in the Saskatchewan Legislature. Unfortunately, they have made certain changes in our Act. The Council of the College of Physicians and Surgeons has to appoint a Discipline Committee, which must hear charges preferred before it; must hear evidence as in a court; must do everything, in fact, in the regular legal way, giving every man a right to be heard. Then, if the decision be not satisfactory to the man who is accused, an appeal may be brought before a judge.

We had a very unfortunate case recently. It was long drawn out. It was unfortunate in this respect that it cost the province of Saskatchewan about $8,000. One of our men was using an Abraham's machine. We were not finding anything against the machine itself, because we knew nothing about it, but we found fault with the method by which that particular man was practising his profession through the agency of this machine. We held sessions for eight days and investigated the whole thing, with counsel on both sides. A full and a very fair trial was given, which resulted in the man's losing his license. The case was then appealed. It went before a judge, who took the evidence and read it over, and, while he decided that the fellow had done the things he was charged with, the judge said, in effect, 'This man is young and has capability, and although he has done these dastardly things, still I am going to restore his name.' One year afterwards that man's name was restored to the register. We felt that having had opportunity of hearing all the witnesses, we were in a position to more properly interpret the particular kind of evidence submitted than could any judge. As a result of the action of the provincial legislature last session, if any man now wishes he may have a trial *de novo*, where a judge without any special knowledge of medical science, and who is not as capable of properly interpreting the evidence submitted, will be in a position to render a verdict on the case. I believe that that is fundamentally wrong. In Great Britain, if I am correctly informed, it goes before the Medical Council and there is no appeal except on a point of law, or if bias can be shown in the committee. I am of the opinion that we will never deal with discipline in a proper way until we get some such method where there shall be no appeal from the decision of the council except as regards a point of law or where the discipline committee is found to be biased. Coming back to the subject more directly under discussion, I would say that the proper function of a licensing body is simply to find out whether or not men who have graduated, are reasonably well qualified to practise their profession. Wholly differing from my friend Dr. Murphy I think that it is no part of our duty to attempt to separate the sheep from the goats thereafter. I think we must leave to a discriminating public their right to do that. I say that as the result of some little experience. I believe the public wishes something left to its own good judgment. Even regarding what we call irregulars—I am not using the term "irregulars" in Dr. Murphy's sense—I mean the men outside of our own profession—we find that there is in Canada to-day a demand for those people. If that were not true we would have very much less difficulty in dealing with them. I believe that we ourselves as medical men in Canada are somewhat to blame for the present conditions; that we are not paying sufficient attention to psychical elements in our practice. Osteopaths and chiropractors apply the principles of

salesmanship to their profession; they also pay attention to their patients' psychical outlook. Those two things they trade on. Their aim is to get something across to the public and they have succeeded. Too often we go over a patient carelessly, treat him, turn him out and collect a fee. I do not believe that the medical profession to-day is paying sufficient attention to the patient as such and that if medical men would go into his case thoroughly, leaving no stone unturned, not only to understand the patient's physical ailments, but to understand the patient himself, we would do away to a large extent with those people you might choose to call "irregulars", that is, men outside the medical profession.

Let me come back now to the schools. On the school lies a very great responsibility not only with regard to teaching, but also in the selection of those to be taught. I believe, further, that just as we are giving more attention to the teaching of scientific medicine, we should also pay greater attention to the ethical side of the profession. This would be of great value both to the profession and to the public.

In closing I wish to venture the hope, that the time will not be far distant when all the provinces will agree that medical registration will be granted only to those holding an L.M.C.C.

The CHAIRMAN: I wish to call on Dr. MacCallum to continue the discussion. He is reading a paper which more particularly refers to Licensure in Ontario as it applies to the general problem we have under consideration to-day.

Dr. JAMES MACCALLUM (Toronto): I would like to say a few words on what has been said by Dr. Murphy and by Dr. Young, about this Medical Council of Canada. Do not forget it is only a chain—a chain made up of links. Those links are not all the same strength. The weakness of the Medical Council of Canada is the weakness of the weakest link that makes it up.

I would like to say a little about discipline. When I was younger than I am now, I knew a great deal more than I do now. A poor chap came before the Ontario Medical Council for performing an abortion, and I voted he be struck off the roll. An older man, who sat in front of me, said: "Do you know what you are doing?" I replied: "Yes, I know perfectly well—I am going to strike him off." He said: "You do not know what you are doing. You are changing an occasional abortionist into a professional abortionist." I am simply bringing that in to bear out my feeling that discipline should always be by the man's peers. I mean by the men who know him and know the difficulties with which that man was faced. One must always think of that. It is not too easy a question to decide.

Dr. Young spoke about this gentleman who ran an Abraham's machine. We tackled that problem in Ontario. The gist of the complaint was that the man used that machine with intent to defraud. How the dickens can you tell that he used it with intent to defraud? It is utterly impossible to prove anything of the sort. We found that we were up against it and could not do anything at all.

About Great Britain. I pointed that out two years ago. There are difficulties which have arisen since. Great Britain had reciprocity with Italy; that reciprocity lapsed; Great Britain renewed it without consulting the other parties to the agreement. We have had before the Ontario Medical Council, five Italian graduates who came in through British reciprocity. We had to discipline the whole five.

About Dr Murphy's proposal, that we should have additional examinations for physicians, I thought he got that idea from the British Colonial Service. A man works so many years and then wants an additional salary, and he takes an additional examination and thus he qualifies for higher salary. That can be done in the service but it cannot be done in the profession at large. If you say

in the profession at large that a man must get additional knowledge and you are going to give him a license, you are not going to license him for life—it is for five years or ten years. Are you going to examine him again and again?

In what I am about to say here, I am not presenting the university's viewpoint. After all, we have got to get down to cases. I am here to present the viewpoint of the Ontario Medical Council. To a license, there are two direct parties, and a third party—an indirect party. The parties are, first, the student on the one side, and that student desires to obtain a license with just as little trouble as he knows how. I can see in your faces you all did the same thing. Students have not changed. On the other side, there is the so-called Medical Council, that is the Colleges of Physicians and Surgeons of the various provinces. They are there to see that the public are protected and also to see—and do not forget this because it is lost sight of—that fair play is done as regards the man who is coming in. The result is that difficulties in licensure commence with the very registering of the man as a medical student.

In Ontario we practically divide them into two classes—Ontario students and those who are not. For Ontario students we demand the middle school examination, that is really the junior matriculation. That leaving examination is, with the consent of four out of the five universities, taken as the junior matriculation. The remaining one of the Ontario universities does not accept that but has a junior matriculation of its own. The junior matriculation of that university not agreeing with the others is not accepted by the College of Physicians and Surgeons. The other way of getting in is by a degree in arts or science. On the face of it that looks like plain sailing. There are some of the universities agreeing to this middle school examination being the junior matriculation. There are some of them who also have an Arts examination of their own, which is not equivalent to the middle school junior matriculation. These arts institutions occasionally will take a certificate from a technical school. Well, unfortunately, for the school, the local College of Physicians and Surgeons cannot accept that. There is another little trouble. There is a desire on the part of various universities of Ontario to help men who are over 21 years of age, and who probably have not had in their earlier days the educational chances that they should have had. They say to them, "We will take you into arts and if you make good you won't have to pass the matriculation examination." Now, those that the medical council runs across are the men who did not make good, that switch into medicine either because they have not the time on account of their getting on in years—something of that sort—or because they feel they could not get through arts. We have a great deal of trouble with those men, because they cannot comply with the preliminary requirements. You will, perhaps, say that there ought not to be any difficulty about a degree in arts or science. But is a degree of household science or engineering science not acceptable? Would you say we should not accept any case where they do not take the preliminary examination, the equivalent of which we demand of the ordinary matriculant.

Then we get another class of case—a man who has gone into commerce and finance and got his degree. He has never taken Latin or other matriculation subjects; but his university, naturally enough, although it finds he has never taken Latin, etc., wants to help him all it can, and says, "Is not a degree in commerce and science equivalent to matriculation?" The answer is, "No." That is where the council must protect other men who come in at the same time. Why should these other men be compelled to take Latin and other subjects which this man has never taken.

As regards the students from outside of Ontario, in order that they may register they must have a degree or else a certificate of matriculation equivalent to the Ontario matriculation. In actual practice we go a little further. In

view of the existence of the Canadian Medical Council we tell those men that they must show that the matriculation certificate which they are offering to us is also satisfactory to the province in which they reside—we go that far with it. As long as passing the examination of the College of Physicians and Surgeons of Ontario was the only way of obtaining a license, our difficulties in licensure were comparatively few. But difficulties, numerous and unforeseen, arose as a consequence of the provincial legislation. A difficult problem we have had is that of the student who has failed at the Ontario licensing examination. It may be only once, although some of them have failed as many as four times. They come down to the Canadian Medical Council and pass the examination whereby they get their certificate. Then they come to us and say, "Register me."

I want to congratulate Quebec on the stand that it has taken in this regard. If we too said to a student, "You must have a license before you can get your certificate," we would not be in any such difficulty as at present exists. Quebec also goes further and asks for a man's matriculation and it is well within its rights in doing so.

Now, because of the difficulties of completing the university examinations in time for the examination of the Canadian Medical Council, the other provinces have agreed among themselves to give an enabling certificate to one who may not have as yet been published as holding his degree. This interim certificate is sent down to Dr. Powell; registrar of the Canada Medical Council, then if the man fails in getting his degree we have to notify Dr. Powell to that effect and the man does not get his second enabling certificate, which is the real one; the first one being simply an interim certificate. I want to make clear the idea that there is a different way of approaching the Canadian Medical Council. One is by an enabling certificate. A man may not have his provincial license and he may not at the first have his enabling certificate based on a degree, but that is simply because the results of the examination have not yet been announced. The Canadian Medical Act says that the enabling certificate must be issued from his own provincial council.

I think you ought to know of the attitude of the Ontario Medical Council. Its attitude is that it does not matter where a student pursues his medical studies. He may go for them wherever he sees fit. We do not care where it is, but if he has been born in Ontario, if he has had his preliminary education, passed the matriculation examination, and his parents live there, he must, if he desires to register in Ontario, obtain his enabling certificate from Ontario. I want you to get—I hope I have not gone over it too quickly—all the different features that enter into it. He may present himself at the Medical Council of Canada and get an enabling certificate from some other province, but he cannot evade the Ontario Regulations in that way and register in Ontario on that L.M.C.C. certificate. He does not lose his Ontario nationality by studying in Quebec, nor can he gain an Ontario nationality by studying in Ontario. He must go to his own province for his certificate. Nor will Ontario grant an enabling certificate to any one—Canadian or not—unless he has satisfied all the examination requirements for a license in Ontario. An Ontario student does not lose his provincial nationality even if his parents have, during his course of study, moved to another province. An American does not become an Englishman because his parents take up their residence in England; nor does a German become a Frenchman because his parents move across into France for commercial reasons. Of course it is a very different question. It is evident there will be any number of variations in the factors involved in this question. These, as they arise, will be dealt with on their merits by Ontario. One variation has already presented itself quite frequently. A student not born in Ontario, not residing there, seeks to register his matriculation in Ontario. Such students are informed that they

can come into Ontario by passing the provincial examination. They are told, as soon as they seek to register matriculation: "You will not be given an enabling certificate for the Medical Council of Canada because you are not of our province."

Another difficulty we have comes because of our proximity to the United States. We have a number of students who like to take some part of their course on the other side of the line. We classify them under the head of split certificates. This is a very difficult question. A man will, for some reason or other, come from one of the States, and then, to decide that, it needs the brains of a "Philadelphia lawyer." All we can do is to try to discourage that practice as much as we can.

The question of enabling certificates for foreigners who seek to take the examinations of the Canadian Medical Council is one upon which the provinces should come to an agreement amongst themselves. The necessity for the strictest surveillance of certificates is shown by a case from Alberta. This gentleman had matriculated in Jamaica. He graduated from the Osteopathic College of Los Angeles, and in some way or other he managed to obtain a license in Alberta, possibly by examination. He sent his fee and he was registered in Great Britain. He presented a British certificate to Ontario and demanded registration. Fortunately we held him up and he was refused, and he departed for sweeter climes. As you all know, Saskatchewan, British Columbia, New Brunswick and Nova Scotia, have not reciprocity with Great Britain. Quebec is, I am informed, having difficulty with Great Britain. It seems probable that eventually all the provinces of Canada will be forced to sever relations with Great Britain because of the seeming impossibility of preventing students making use of the British license as a backdoor to get in to the provinces whose regulations they are unable to satisfy. That Ontario students might not make a backdoor entry, Ontario had incorporated under the reciprocity agreement that Ontario students must have been absent from the province five full years before they could use the British license to qualify in Ontario. Since that agreement was made, the course of study in Ontario has lengthened to six years. Ontario is now put in the position of discriminating against its own students.

I think possibly you know something about the difficulties of licensure. It would be an ideal system if there were no loopholes, if there were no students seeking to get in through the backdoor.

The CHAIRMAN: It has been suggested that Dr. Meakins should take part in this discussion, and I am sure we shall be glad to hear from him.

Dr. J. C. MEAKINS (Montreal): When I was asked, at the request I believe of Dr. Murphy, to discuss the academic side of this subject, I did not quite appreciate what I was letting myself in for, and if you will pardon me, I will have to steer a very careful course so as not to steal all my own thunder from to-morrow afternoon.

As I have been sitting listening to the able addresses given before, the matter has been going through my mind—I see nine divisions, and from some of the words I have heard, I should think nine nationalities, although I have never yet realized we had nine nationalities. Now, in the medical profession, why have we nine divisions? I will not attempt to answer that question. It has grown up into that condition of affairs with several reasons for it. Some of them are personal; some are academic.

As I have been called upon more or less to answer the indictment of the academic side of this question, I will restrict myself entirely to that side. I am lost in the maze of split certificates, domiciles, nationality, etc. After all, in this country of ours, there are only nine institutions that grant medical degrees; there are not many—only nine. The licensure, as I understand it,

from the intellectual or academic point of view is divided into two important divisions—the quality and the quantity of a man's non-professional education, and the quality and quantity of his professional education. The first, in the last sixty years, has grown up in a very radical fashion. Our forefathers, in a widely separated country, had their own ideals of how they wanted their children educated.

Whether the child is to be a pickpocket, a doctor, a lawyer, an engineer or a farmer, has nothing to do with medicine. It relates to the education of the people and as such follows naturally hereditary lines of development. The men of Nova Scotia have certain ideals as to how they want their children educated; so have those of British Columbia, etc. These are personal ideals and with such as a medical profession we have nothing to do. But you may say that the universities who give professional education should see to it that all who enter their doors are properly equipped to carry on and become educated in the proper line of their profession. That being the case, and having nine divisions in Canada, it is time that we take stock and set ourselves to answer the question, "What are the minimum academic and intellectual requirements which a boy or girl should have who enters a medical school?" We must come to some arrangement about that, otherwise we are putting it on the shoulders of a university to trim its sails in ten different ways in order to suit the requirements of each province and its own ideals as a university.

After all, it is an important function to-day of a university, through its barriers of entrance, to raise the preliminary education of the country at large. irrespective of whether its graduates are going to be doctors or anything else; that is an important function. But, unfortunately, it is not so easily done as said. It is a very difficult question, one which I would much prefer that some of the secretaries of the medical faculties or universities should discuss than that I should. But when it comes to the question of the medical education which the university gives to its students, that is its own affair. If the licensing bodies do not believe that the universities are properly educating the students, whether one or all, it is their duty to say, "We will not accept your degree." But I do not think it is fair for any licensing body to go to a university and say to them, "You shall teach this boy in a certain fashion and teach him certain things." On the other hand, the licensing body should be able to say, "The product of your university, to be accepted by us, must come up to a certain standard; but how to do it is your own affair. Whether the student shall spend four or five, or twenty years, at the university—for you can teach some men in four years what other men would never equal in twenty; that is the university's responsibility entirely, it is their job. You tell them what they should attend to, but they must attend to it."

I was interested in the comparison referred to by Dr. Murphy, comparing a medical student with a medical practitioner having an Edinburgh degree; but I would much prefer to take as a comparison a broader degree, one that has no connection with biology at all. Take the education of a boy to become an engineer. He enters a first-class school of applied science, takes his first two years of pure science, mathematics, chemistry, physics, goes on through his calculus, and then has two years of more or less detailed work in the application of those subjects to the general principles of engineering, be it electrical, chemical, mechanical or civil. When he graduates and has his degree in his pocket he is not such a fool as to think that he can go out and get a contract to build a bridge right away. He has to go for a certain number of years into the shops. If he is fortunate enough he becomes a helper, a junior partner or a highly paid clerk in some engineering firm, and eventually he feels that he is to a sufficient degree qualified to go out and make money. He is going to fail or succeed, sink or swim, on his contracts; that is to say, he has to deliver the goods.

Unfortunately, in medicine, it is not so easy. Personally, I would like to see a condition of affairs develop in this country—and I think it will be a tremendous forward step—where each medical student, after he has his degree, would spend a certain number of years as a partner or an assistant to a qualified practitioner in the country at large—I do not mean only rural districts, but urban as well. I believe it would be excellent if such an arrangement could be brought about. After all, gentlemen, you ask the universities to teach a man the science of medicine and also to turn him out a perfect individual; to go forth and undertake anything that his heart or mind may suggest he is capable of doing. Lives are apt to be cheap to him. But we cannot as universities assume that responsibility. All we can do is to give a man his technique. In the first place we give him a preliminary and basic education in the subjects upon which all biological sciences are based, then we teach him as far as we can how to apply that knowledge—we give him his technique of application. Personally, I do not see how we can ask the universities to go any further. We cannot give a man a ready-made practice or make him fit into the scheme of things; that is determined by his own inherent qualifications and qualities. I grant you that during the period of his residence with us at the university—I use the term "us" because I am at the moment more or less charged with that responsibility—we do try so far as we can to adopt a selected policy. If we see a man who we consider is not going to be fit ethically or intellectually, we try to turn him away in the hope that in the end our product will be something of which both we and our colleagues will be proud of.

To come to the question of ethics, I take a firm stand that there is no place in university education to teach a man to be honest. Medical ethics are purely a question of common sense and insight. We, of course, try to tell him the things that are done and the things that are not done, when he goes out into practice. But after that his ambition to follow the straight and narrow path and do unto his colleagues as he would have them do unto him rests in his own heart and soul.

One further word before I finish is on this question of scientific medicine. It makes me smile when I hear it, as if a man who worked in a laboratory were any more scientific than a man who practises medicine. Science is a matter of thinking, not a matter of doing, if a man will pursue his subject honestly to the final conclusion. I quite agree with the speaker, that turning a patient off after you have collected a fee and not knowing anything more about him is leading us into our troubles. He will gradually wander to others who will try and will continue to hang on to him until they do finish. These are the scientific men.

The CHAIRMAN: Gentlemen, the subject is open for general discussion. I hope we shall have a very active discussion and a free expression of opinion. We have had an insight into the academic side from Dr. Meakins. Dr. MacCallum has given us a contribution to the subject by describing the difficulties in Ontario, and Dr. Young has given us a very concise account of the activities of the various medical licensing bodies. We hold in various parts of Canada different opinions, on some of the subjects dealt with by preceding speakers, and I hope we shall have a frank discussion.

Dr. E. STANLEY RYERSON (Toronto): It is difficult to calculate accurately the number of doctors required each year to keep up the supply in Canada. In 1920, an actuarial estimate was made that placed the number at 300. Although about 500 men graduate each year in medicine, a large number of these go to the United States. The present number graduating may be adequate for the present, but, if one is to judge from the statements of prominent financial men, politicians and the press, this country is going to make rapid strides and undergo great development in the near future, so more openings for practice will be available for our graduates in the future.

Most of our graduates nowadays spend one or more years as internes in a hospital. All the interne positions in the locality in which the particular university is situated are filled first, but there are not sufficient positions available for all who graduate and the majority of those who are unable to get a local appointment have no difficulty in obtaining excellent facilities in many of the hospitals to the south of the line.

When these men have put in their interne year or years and they are considering where they can find a suitable location to settle, they are very commonly influenced by the local conditions and stay in the city or neighbourhood, where the hospital in which they have trained is located. In order to settle there, they have to obtain a license from the State Board, which necessitates their taking a further examination. The number of our graduates of the University of Toronto who have taken State Board examinations in the last two years has been: 1924-25, 123; 1925-26, 111. Could anything be done to induce more of these Canadian graduates to return to their native country to settle in practice? I am convinced that the number who return would be materially increased if they felt that they could start practice anywhere in Canada without further examination, whereas, if they wanted to begin in the United States, they would have to take another examination.

The opportunity for returning to Canada might at times present itself later even if a man did decide to practise in one of the States when he had completed his interne service. Many men find that they are not satisfied with their first location and look around for a better one. If every man who graduates from a Canadian university and has the L.M.C.C., could always feel that he could return to Canada, the tie to his native country would never be broken.

Two examples of graduates returning after practising in the United States for some years might be given. One doctor, after being in practice in the United States for seven years, considered locating in British Columbia. He found it would be necessary to pass the examinations of the Medical Council of Canada. He began studying the various subjects, but found it a most trying and arduous task. As he already possessed an Ontario license, he gladly gave up the idea of preparing for the Dominion examination and returned to that province where he is still in active practice. The other example was—one of the candidates for the Licensing examination in Ontario, a man of sixty years of age who was retiring from a successful practice on the other side, wished to finish his days in his native home. He merely wanted to be eligible to join the various medical societies and keep in touch with the profession, but he had to prepare and study in order to pass the provincial examinations. Imagine having to submit to such an ordeal to return to your native land at sixty years of age! Let us hope that the day will come when every Canadian graduate can return home to practice as long as he lives.

MEDICAL COURSES IN CANADA

The medical courses as conducted in the various Canadian universities to-day show marked advances and improvements when compared with those given twenty-five years ago. Each and every one of them provides an adequate and efficient medical education. They compare favourably with any of the courses given in the country to the south of us, or in Great Britain.

If a system of registration of medical schools existed in this country like that in Great Britain, then I have no hesitation in saying that all of the Canadian Colleges would qualify for registration and be placed on the accepted list by Act of Parliament. Under this system, the examinations for qualification for the M.R.C.S. and L.R.C.P. are conducted by the universities with assessors appointed by the General Medical Council. The introduction of this method in Canada would be difficult as it would necessitate very radical changes in the Canada Medical Act.

In spite of the fact that there has been no organized system of inspection of Canadian medical colleges, they have improved and developed in every way as the result of the initiative, sincerity and conscientiousness of the men on their faculties and staffs. The graduates of the Canadian universities can hold their own in competition with those from any part of the world.

Present Method

The steps necessary at the present time for a student to become qualified for practice in Canada consist in his passing, first, his university examination for his degree, then either the examination of the Medical Council of Canada or that of the Provincial Medical Council or of both of these.

In Canada in 1924, there were 642 graduates in Medicine, of whom 300 took the Medical Council of Canada examinations; in 1925, there were 473 graduates and 202 who took the Dominion license; in 1926, there were 515 graduates and 286 took the Dominion license. Up to the present, this indicates that less than 50 per cent of our graduates take the examinations of the Medical Council of Canada.

Each student must, therefore, pass at least two and often three examinations at the end of the final year of his medical course. These examinations are on the same subjects and, at times, even by the same examiners. The purpose of the university examination is to determine if a man is worthy of its degree, while that of the Medical Council of Canada, or the Provincial Medical Council, is to determine if he will be a safe practitioner, but on analysis, these are virtually the same. The passing of the two or three examinations in the same subjects appears to the poor student an unnecessary duplication. The ordeal of a final examination is a serious one and when he has to go through it at least twice and sometimes three times, it becomes decidedly trying for him. Complaints of the students are constantly heard, but as yet nothing has been done to remedy this unreasonable state of affairs. If he is considering locating in the United States, he will take only his University Examinations and dodge the others.

He is often influenced at the end of the long financial strain of a medical course by the question of expense. The extra examinations will cost him another one hundred dollars and many of them are unable to meet this. If he is going into a hospital or to the United States, he may not need his license to practice for one or two years and if all men took the one examination, he might be able to do so with less expense than at present.

Proposed Method of Conjoint Examination

If at the end of the medical course a university should appoint as their examiners the same men as the Medical Council of Canada, then a student might qualify for his university degree and for his license of the Medical Council of Canada by passing one examination.

The following method is proposed for the conducting of a conjoint examination between the Medical Council of Canada, a Provincial Medical Council or Board and a Canadian university. The participation of any Provincial Medical Council or any university in such a conjoint examination would be entirely voluntary. It would in no way interfere with the present provincial autonomy, nor with the authority of a university over its own students.

Method

A Provincial Medical Council (or Board) or a Canadian university, desiring to take part in a conjoint examination with the Medical Council of Canada, shall make application to them for the same some months before the date of the meeting of the Medical Council of Canada, at which the Board of Examiners is appointed.

The Medical Council of Canada, on approving of such application, shall then request the Provincial Medical Council (or Board) or the university to nominate a number of men as examiners in each of the subjects of examination of the Medical Council of Canada. From these nominations by the Provincial Medical Council and the university, the Medical Council of Canada shall appoint the Board of Examiners, selecting a certain portion of the Board of Examiners from those nominated by each of the bodies entering into the conjoint examination.

The conduct of the conjoint examination shall be arranged by co-operation between the Registrar of the Medical Council of Canada, the Registrar of the Provincial Medical Council concerned and the Registrar of the Faculty of Medicine of the university concerned. At the end of the conjoint examination conducted by this Board of Examiners, the results, as determined by the board, shall be forwarded to each of the participating bodies.

The university concerned, after passing upon their candidates, shall forward the names of the successful ones upon whom their degree will be conferred, to the Provincial Medical Council (or Board) of their own province and to the Medical Council of Canada. The Provincial Medical Council (or Board) concerned, after passing upon the successful university candidates, shall forward a list of their names to the Registrar of the Medical Council of Canada. The Medical Council of Canada shall consider the names of those candidates which have been submitted by the Provincial Medical Council or the university concerned, or by both these bodies, and grant the license of the Medical Council of Canada to the successful candidates.

The holding of conjoint examinations, whereby the students would obtain their degree from their university and their license from the Medical Council of Canada, would result in a marked increase in the number of graduates of Canadian universities of the Medical Register of Canada.

Results of Holding Conjoint Examination

This would provide more potential practitioners to meet the needs of the country in its rapid development of the future. The fact that a doctor is enrolled on the Register of the Medical Council of Canada would make a perpetual tie to Canada. If he should go to the United States for interne service, he could return at the end of it to locate here. If he began practice over there and decided later that he wished to change his location, the possibility of returning to Canada would always be open to him without having to submit to further examinations. Such an effect in these days, when we are losing so many of our good men to the United States, would be greatly to our advantage and increase the tendency of many of these men to return.

The effect of such a conjoint examination upon a university would be beneficial. It would result in a certain healthy competition between universities to obtain as many successful candidates as possible, similar to that which exists in Great Britain between the candidates from the various medical schools of the M.R.C.S. and L.R.C.P. examinations.

The fact that the students have to prepare for an examination by a Board of Examiners, partially composed of examiners who are not their own teachers, would necessitate a broadening out of the students' outlook. They would get away from that narrow attitude of knowing what this or that man expects as an answer, when he asks a certain question.

By the holding of only one examination, instead of two or three as at present, it would relieve the student of the prolonged strain to which he now has to submit. There would be no choice of Licensing examinations, so the student would not be able to select what may appear to him as the easier one when two are available. It might not be necessary for him to obtain his

provincial registration until after he had completed his interne experience in a hospital, so that his expenses on graduation would be materially reduced.

The introduction of this method of holding conjoint examinations would in no way whatsoever interfere with provincial autonomy. Each student would still have to obtain his enabling certificate from his own province. Each province would still retain its present requirements as to matriculation, curriculum, etc. Any graduate desiring to locate in a province would still have to pay the registration fee for that province, so this step would not result in any financial loss to the province. The holding of a conjoint examination would probably reduce the number who at present take only the provincial examinations.

The ideal of medical education and medical licensure to which I would like to look forward in the future is when every graduate in medicine of a Canadian university will be enrolled as a licentiate of the Medical Council of Canada.

Dr. J. H. MULLIN (Hamilton): I understand from the chairman's remarks that the principal advantage of this conference is that suggestions may be offered which may bear fruit as the result of later consideration. I have a suggestion to offer which has not yet been presented; I wish to speak particularly about what happens to the graduate after he gets into practice. The Minister of Health made passing reference to this. The President of the Canadian Medical Association said something about good doctors and better medical services. The Chairman in his remarks dealt particularly with what happens to those who would seek higher qualifications, with the object in view of going into specialist work. The Deputy Minister of Health gave a veiled suggestion that ultimately state medicine might offer a solution. I would like to have followed Dr. Murphy, who opened this discussion, by dividing the groups he referred to into three sections: First, those who become interested in our medical organizations, local, provincial and national. I believe earnestly that these organizations are interested more in the character of service than in selfish ends. I know that we have difficulty all over the country in getting people to listen to the business side of our work, that they are actually more interested in the service side of our organizations. Dr. Murphy referred to the group who become prominent in community life through various activities and might have added, who go into municipal, provincial or Federal politics. He, however, said very little about a group who do none of these things and who make it their chief concern to study methods of getting business and, in so doing, adopt the tactics of the charlatan, in probably their meanest form, in order to accumulate wealth.

We know that the universities have gone out and given lectures under their own auspices all over this country, and even the heads of departments are interested in this and enjoy the work, but there are a very large group of men who do not take part in this teaching. What do our organizations propose to do in regard to this? Dr. Young says that the public should be allowed to choose. I would differ from Dr. Young. I believe that ultimately we must give every man in general practice some periodic post-graduate qualifications. I have no resolution to present, but I do believe that we should take some action in the matter of the irregular in our ranks, who takes no interest in the scientific program and never attends his association meetings. The man who will not keep up-to-date is more dangerous to the public than the out and out quack or so-called irregular. I hope that this suggestion, while it cannot be acted upon at the present time, will cause this matter to be given further consideration and that ultimately a program of periodic post-graduate qualifications will be gone into.

The CHAIRMAN: I should like to hear from Quebec or Manitoba.

Dr. E. J. C. KENNEDY (Montreal): Dr. Belanger, the President of the College of Physicians and Surgeons, was here this afternoon but has left in order to go to Quebec, and he requested me to represent him during his absence.

This brings to my mind what practically has been mentioned this afternoon, that is the fact that certain privileges have been requested by Saskatchewan for the profession, the different professions, that is to say, the Professional Board, to consolidate the difficulties that arise as regards ethics and the character of some of the members of the medical profession.

The CHAIRMAN: It is, I think, the Province of Alberta which has asked these privileges.

Dr. KENNEDY: I may say that at the present time Dr. Belanger has gone to Quebec to see if a similar Bill would be passed through the legislature. The College of Physicians and Surgeons has applied for similar powers to the legislature and the Bill is before them and it is to be decided to-morrow morning or afternoon.

I sometimes believe that we in the professions are a little harsh to those of our own kind, and the judges are lenient. I was amazed a few days ago, when I was in one of the Montreal courts giving testimony in a case, to see the leniency of the judge. In fact I was overcome to think that very often in these cases, instead of sending a man to jail for one year, he asked the plaintiff to withdraw the charge and he said to the prisoner: "This is your first offence; I hope you will not do this again." He let him go free.

I found Dr. Murphy's address most interesting. He emphasized the ideal conditions which should obtain. His point of view, apparently, is to try to realize these ideals as quickly as possible; but, unfortunately, while we would all like to hasten the movement toward making the country perfect, we know that things must move slowly and that progress is indifferent to our eagerness to accelerate it.

In connection with the ethical point of view of the profession, I may say that at the present time conditions are much the same in France and Central Europe. Not many days ago, I read an address by one of the professors of medicine of the university of Paris deploring the fact that medical ethics in certain parts of France have fallen to a very low level; that to-day the profession in France is looking primarily for profit, and that many have lost the point of view of the old days when men worked for the love of the art. He attributed this to the war and said that formerly the ranks of the medical profession were filled by sons of parents who brought them up with those specific ideals and objects in view; that following the war there has been a marked spread of commercialism which has imbued the whole country and that the medical profession, as well as other professions, is suffering in that respect.

With regard to the subject of medical licensure in Canada, I may say that I was deeply impressed with the clear, logical paper that was given by Dr. MacCallum. I believe he has gone over the subject in a very thorough way and has given us a clear understanding of the difficulties we have to contend with and which are not very easily solved. At the First Conference in December, 1924, he covered the same subject in a very masterly way, pointing out the conditions that exist in the different provinces at the present time to bring about unification or standardization in our different interprovincial affairs. The matter is somewhat difficult in the province of Quebec. We have as a standard the Bachelor of Arts degree. One of the reasons for this is that students of a certain class have to go to the classical colleges, where they spend eight years from the age of ten to eighteen, going through courses in Latin, Greek, mathematics, etc. At the end of that time they get their B.A., and are considered as qualified. These colleges are more or less on the basis of

the French Lycees or the colleges that compose part of the buildings of Oxford, or even the Pepiniere in which a number of Prussian aristocrats are educated, and which was founded by Frederick the Great. The system we have in Quebec has been accepted and cannot very easily be changed. As I say, after these students get their B.A. they are then qualified to take up the study of medicine. There are a number of young men who leave college perhaps in four or five years and then express their desire to study medicine. For these we have a preliminary examination prior to the medical study.

I think the Medical Council acted in a very masterly fashion. In this sense we have no difficulty with the Medical Council of Canada. We accept the license that is given and very little trouble ensues. I do not know whether some complications might have been brought about.

Dr. LÉON GÉRIN-LAJOIE (Montreal): Starting with the sentence of Dr. Murphy in reference to " the new remedies to old evils," may I ask Dr. Murphy, after what Dr. Ryerson has said, if we are looking for new remedies—are we looking for remedies at all? It does not seem so to me. Dr. Ryerson stated that less than fifty per cent of the doctors coming to the universities apply for the Medical Council of Canada. He said it should be done so that all the doctors should go through it, and moreover he facilitates the obtaining of the certificate, —suggesting the examination ought to be one instead of two or three as exists at the present time. It would facilitate it and he said that in some years from now we will be short of doctors. No fear; there will always be too many, but we might be short of too many good doctors in my opinion. If it facilitates the obtaining of the certificate and permits doctors from the United States to come over into Canada, obtain the certificate of the Medical Council of Canada, and practise in Canada, then what kind of medical immigration will we have? Really it seems to me it is not a remedy at all.

I am not representing a body of any kind, but am only a professional man from the province of Quebec. That is the opinion I formed after listening to all the very interesting lectures.

Dr. Meakins said that ethics should not be taught; it is only common-sense. It is more than common-sense—it is conscience. It cannot be taught. Doctors should give an example—the old to the young—of what is really ethics. He insisted also on the fact that the young doctor who is going out from the university has no opportunity of practising anything. He is right. He states that the professional man should take young doctors as assistants. I think that has been done previous to the foundation of universities and, in my opinion—I do not know if I am right—it seems to me impossible. Even in the hospitals it is very hard for a doctor who has a private patient to have the interne take even the history of the patient. The patient will not let any one else but the medical man who treats him take a history of the case. The only remedy, in my opinion, is that interneship should be obligatory in all universities after the five, six, or seven years' course.

Replying also to Dr. Ryerson's paper, he said we had 123 men in 1925 and 111 in 1926 taking licenses in Ontario and who went to the United States to practise. Out of these men, how many were Canadians, Canadian-born? Were they all, or only a few?

Dr. RYERSON: Practically all.

Dr. LÉON GÉRIN-LAJOIE: I understand that places of interneship are very rare in the Canadian hospitals. I believe that if these hospitals could pay a remuneration of some kind at the end of the month, as is done in some United States hospitals, it would be much better for those men concerned; but I suppose this is practically impossible.

The case reported by our confrere of a man sixty years of age who was born in Canada, went into the United States to practise, and, following this, came back at the end of his career to establish himself in Canada, I believe, is a rather exceptional one and should not be taken into consideration. But apart from this, I consider the suggestion of having all the Boards of the National Council, the Colleges of Physicians and Surgeons and the universities unite together to hold conjoint examinations, is impracticable. For instance, in the province of Quebec, examinations are passed in accordance with the requirements of the universities and the College of Physicians and Surgeons—there is only one examination for the two. We have students who come to pass their examinations before the university authorities who do not want to have the Quebec license; they just come before the Board of Examiners of the university because they merely want a diploma either from Laval or McGill; but as they do not want to practise in Quebec, they really do not have any reason to pass before the Board of Examiners of the College of Physicians and Surgeons.

Dr. B. SIMARD (Quebec): I am not very well acquainted with the English language but will try to make myself understood. I am not speaking as the President of the Canadian Medical Council, but on behalf of Laval University, which I represent with my friend, Dr. Dagneau. I believe it would be easy to have only one diploma. Certainly easy to come to an understanding in the province of Quebec and to have only one examination, that of the Federal Board. In the province of Quebec there is a joint committee from the university and the provincial medical board for the examination. I do not think that Laval University would have any objection at all to accepting an examinee from the Federal Board. I think if my board decided that we take steps to settle that question, it could be done very easily. Then the question of money would be settled and the question of the provincial diploma of men licensed will be settled under a Federal Board and there would be only one examination. What we want is qualification, and if a doctor is qualified to practise in the province of Quebec, I do not see why he should not be qualified elsewhere.

In the meantime I do not see that Ontario should not have the same right. I do not intend to force that question, but I think it will be put on the program and be discussed at our next meeting, and I think if you really want to come to any understanding, it would be easy.

Dr. YOUNG: Dr. MacCallum said that the province of Quebec insisted that graduates holding an L.M.C.C., but coming from a province other than Quebec, were amenable to their regulations governing preliminary educational requirements, before being permitted to register in that province. The province of Quebec does not stipulate what any other province shall do with regard to their own students. It is true that the Registrar of Quebec has fallen into error, in this matter.

I will take a concrete case. Suppose a man from Saskatchewan entitled by his board to be a candidate before the Federal Board passes his examination, comes to Quebec and is accepted. A man from Quebec having his domicile in Quebec but in his first year of study, learning that he has a chance with $25 to be registered in another province, sends the $25 to a registrar in Ontario or a western province and is registered as a doctor in that other province where he has not his domicile; then after he has passed his examination at Laval, McGill or the University of Montreal, he is entitled by this new province to be a candidate, after having secured his Federal diploma, but is refused in the province of Quebec. He is refused, notwithstanding that he is a Quebec man, and to be entitled to become a candidate he must comply with the rules and regulations of the province of Quebec. There is no difficulty here. The only difficulty comes when a student tries to fool us; and we are clever enough not to be fooled.

Dr. MacCallum: There is just one thing more I intend to point out which may not only cause trouble but which is unfair to the student—I would like Dr. Simard to understand this. Supposing a man whose domicile is in Quebec comes to an Ontario university and takes his studies there, Quebec will not issue an enabling certificate for him; but says, "You can go to Ontario, get your license there; you can then take the Canadian Medical Council's examination, and you can come back." But here is the trouble—Ontario says, "You are not an Ontario man at all. Your home is in Quebec. Go back to Quebec"—and the poor devil falls between two stools.

Dr. Simard: The man from Quebec, if he is satisfied with the teaching in his province and satisfied to comply with the rules and regulations of his own province and on going to another province he is not satisfied with the rules and regulations of that province, if he has the right to practise medicine in Ontario, becomes a candidate of the Federal Board and is accepted, we will accept him, but he will first have to be licensed in his own province.

Dr. MacCallum: I quite agree that Quebec is within its rights—Ontario also; but what rights has the poor fellow got?

The Chairman: Before I call on Dr. Murphy to reply, are there any others who wish to speak on this general subject?

Dr. J. G. MacDougall (Halifax): I desire to be brief. I want to make one or two comments in a general way. I consider that it has been worth my while coming a long distance if I hear nothing more during the days I will be here than I have heard this afternoon. There has been so much that I appreciate, so much that I consider of value, starting with Dr. Murphy's paper down to Dr. Ryerson, and any remarks of mine along that line would simply be an attempt on my part to paint the lily or gild the rose. I am delighted, and as Chairman of the Committee on Education of the Canadian Medical Association, I may say we have given very serious thought to these problems, and many of our views are just along the lines laid down this afternoon so splendidly by the different speakers.

While I am on my feet, I shall just make reference to one or two little things relative to our situation. Down in Nova Scotia we still retain good relations with the General Medical Council of Great Britain. Situated as we are, in close relation with the British Isles, many of our young men desire registration on the Colonial list, which gives them eligibility to practise in the British Isles and eligibility for the services, and some of these young men are to be found in various parts of the world filling important posts. We really cannot afford to throw over our reciprocal registration, knowing as we do the value of it to these young men and the broadening influence that it gives to the graduates of our medical school. You can plainly see that on account of these arrangements—I am speaking now for our provincial Medical Board—we stand to lose if we assign our rights to examinations and accept the examination of the Medical Council of Canada. That body would not have been able to give our students the rights they now enjoy through registration on the Colonial list of the General Medical Council of Great Britain.

One more point and I am done. You will pardon the local touch, but my object is this, that this representative body of men from one end of Canada to the other may know the situation as it is with us. We have, as has been pointed out by Dr. Simard, a conjoint examination between the medical school and the Provincial Medical Board. It works out most satisfactorily. There is a nice understanding between the teaching body, which is the degree-granting body, and the Provincial Medical Board, which is the licensing body. It is most harmonious, it is most satisfactory, it is most efficient, and

if that which we have found so satisfactory in a local way were carried just a little bit further and made applicable to the activities of the Medical Council of Canada as an examining body, I should hold up both hands, and I am sure that every one who has at heart the best interests of medical education and ideals in regard to licensure would hold up both hands for it.

Mr. President and gentlemen, I do think the day will come, and I hope it is not far distant, when the present anomalies in respect to the Medical Council of Canada—and I say this with the greatest respect and not as a critic—will have vanished, when such a scheme as that outlined by Dr. Ryerson is adopted.

Dr. Powell (Ottawa): In connection with what Dr. MacDougall has said, I would like to tell this body that so far as Halifax is concerned, registry with the class is forty to take the examinations of this council in June of this year.

Dr. MacDougall: That is perfectly right, but there is absolutely no incompatibility with what I have said.

Dr. Young: Great Britain has accepted as a qualification the examination of the Medical Council and graduates with that qualification are eligible for registration in Great Britain under reciprocity. That was settled about three years ago.

The Chairman: We have covered a wide field and I am sure it has been a most illuminating discussion. I think we are understanding one another better as a result of the various views which have been expressed.

Dr. Hattie (Halifax): The complexity of the systems which exist today entails a large expenditure upon the part of the medical student which he might put to much better advantage. For this reason I would urge that serious consideration be given to such a scheme as Dr. Ryerson suggests. It would surely lessen the cost of medical licensure and leave to the students money which they might put into postgraduate work. I have had some such scheme in my mind for several years. Dr. Powell will remember my having discussed it with him some considerable time ago—the possibility on the part of the Medical Council of Canada of carrying on very much as the General Medical Council of the United Kingdom does; that is to say, to have a Board of Appraisers appointed by the Medical Council of Canada, perhaps two or three boards, make an arrangement with the various universities, then let these Boards of Appraisers be present and take part, if they would, in the examinations of the various universities. That would mean, of course, that unless such a board reported favourably upon the examinations as conducted by the several universities, their degree would not be accepted as sufficient for licensure. It would serve as a stimulus to the different universities to see that their teaching was of the quality to ensure their degrees being accepted. Also I think it would lessen the cost very materially, eliminate the necessity of other university examinations and save some money for postgraduate work.

Dr. E. Ryerson: In view of the discussion which has occurred, I should like to suggest that the following resolution be referred to the Resolutions Committee:—

> "That this Conference of the Medical Services in Canada recommends that the feasibility of holding a conjoint examination between the Medical Council of Canada, the Provincial Medical Councils or Boards and the Canadian Universities, be given consideration by each of the bodies concerned."

Dr. MURPHY: In view of this resolution, Mr. Chairman, I should like very much to be a member of the Resolutions Committee, if that is possible.

The CHAIRMAN: We shall add the name of Dr. Murphy to the Committee on Resolutions.

Dr. SEYMOUR: I suppose when the committee make a report it will embody therein that this question will be sent to the Federal Board, the Provincial Boards, and to the Universities concerned, in order that it be studied.

The CHAIRMAN: That is the suggestion, Dr. Ryerson, is it not?

Dr. RYERSON: Yes.

The CHAIRMAN: If there is no further discussion, Dr. Murphy will have an opportunity of replying.

Dr. H. H. MURPHY (Kamloops): I wish to say, gentlemen, that the whole discussion has been very happy and very satisfactory to me. In outlining the ideal for Canadian medicine I did so intentionally in general terms, and my highest hopes have been realized in the discussion which has followed. To see difficulties in the way to overcome is perfectly natural. I knew they were there, and I am very glad they were brought into the discussion.

The CHAIRMAN: This whole discussion has been very illuminating and exceedingly useful, and I hope it will bear fruit when we have the matter discussed in the different councils and teaching bodies. It will become a real live question, which I hope will be settled satisfactorily.

I now adjourn the conference until to-morrow morning at 9.30 o'clock.

TUESDAY MORNING SITTING

The conference resumed, Dr. Primrose in the chair.

The CHAIRMAN: I have pleasure in announcing that we have with us this morning Miss Shaw, Director of the Graduate School of Nurses of McGill University, Montreal, and President of the Canadian Nurses' Association; Miss Gunn, Superintendent of the Toronto General Hospital, Canadian Nurses' Association; Miss Bennett, Superintendent of the Ottawa Hospital; Miss Smellie, Superintendent of the Victorian Order of Nurses, and Miss Cowan, also of the Victorian Order of Nurses. We welcome them here not as guests alone but as members of the conference, with all the responsibilities which that entails, and we hope that they will take part in any discussion that may be of interest to them.

The first item on the program this morning is a paper by Dr. Lessard on

COUNTY HEALTH WORK IN THE PROVINCE OF QUEBEC

Dr. ALPHONSE LESSARD (Quebec): Provincial sanitary organization in Quebec, generally speaking, and as far as the technical services are concerned, is established on the same basis as in other provinces of Canada and most of the states of the American Union. General administration, vital statistics, tuberculosis and child welfare divisions, and county health work are immediately under the central direction situated at the seat of the Government, in the city of Quebec, while certain technical divisions such as laboratories and sanitary engineering have their headquarters in Montreal. There is also in the latter city the office of the General Inspector, in charge of the eighteen district

health officers, who are supervising as many regions of the province. The duties of these full time men have been, so far, to supervise the sanitary conditions of the population under their jurisdiction, to be the intermediaries between our service and the municipalities, to see that the law and regulations are observed; briefly, to be our representatives among the population of their respective districts.

With the exception of the largest cities, municipalities are very few in our province employing a full time Health Officer. Nearly all of them are general practising physicians, giving for a small salary very little of their time to their official functions. We all know, through experience, what is the value as far as public health is concerned of the part time man.

The result is that every one of our eighteen district health officers has a wide territory to cover, a great number of municipalities under his supervision and a large population to protect. Some of these districts include 75, 80 and even 90 municipalities. You will readily understand that many of these are seldom visited by our officer, and only on special calls or in urgent cases, for instance during epidemics; some of them are not even visited once during a whole year.

Moreover, he is all alone to do the entire work and to look after everything; schools, public buildings, general health conditions, and nuisances of every kind. The Public Health nurse, who is so indispensable in an organization of hygiene, is an unknown person in the regions looked after by our Health Officers; I mean the rural part of the country, because there are many of them in the cities, and especially in the 21 centres provided with tuberculosis and baby clinics created by our service. Therefore, our officer is obliged to neglect a lot of things about which he could attend to if he had the co-operation of one or more public health nurses.

The consequence is that the education of our rural population in hygiene matters has been a slow process, so far.

In 1925, I had the good fortune, as a guest of the International Health Board of the Rockefeller Foundation, to visit a number of States, city and county health organizations in the United States. I particularly studied the methods employed there to solve the various health problems among the rural population, and in certain parts of North Carolina and Ohio, where conditions are somewhat similar to those of our province, I made a survey as complete as possible of a system, which, after many trials, had been adopted and was giving excellent results.

This system is the "County Health Unit", and, after having seen it functioning in the States and observed its advantages, upon my return I submitted to my minister the project of trying it in our province, inasmuch as it could be adapted to our local conditions and to the mentality of our population. The Honourable the Provincial Secretary gave me entire liberty to inaugurate this new policy, and we began our work.

What is the County Health Unit system which we are presently organizing in our province of Quebec? It consists in the establishment in a county or in two small neighbouring counties of what I might designate as a "Bureau of Health in miniature," composed of a full-time medical officer, two or more public health nurses, a sanitary inspector charged with the enforcement of the health regulations and with the education of the municipal officers, together with a secretary to handle the clerical work of the office, which is generally located in the principal town of the county. The whole population of the county is thus submitted to constant supervision on the part of this staff. Health education is intensively carried on, a considerable amount of propaganda work is done continually, and not a single municipality escapes the attention of the officers of the unit. The medical officer covers all the parishes, meets there the civil and religious authorities, maintains cordial relations with local doctors, gives public lectures announced the preceding Sunday by the curé in the pulpit, has friendly

talks with mothers on the necessity of pre-natal, post-natal and pre-school hygiene, visits the school and looks after outbreaks of infectious diseases. The nurses examine the school children and refers those defective in any way to the family physicians; they give the teachers instruction in hygiene which they, in turn, pass on to their pupils; they go directly in the homes of the people to make them understand the necessity of following the golden rules for clean and healthy living; they advise young mothers how to protect their babies or babies-to-be, etc. The sanitary inspector visits the municipal officers, assists the secretary-treasurers of the municipalities in the enforcement of the health laws, looks after water supplies, sewerage, nuisances, sees that quarantine is observed in case of contagious diseases, etc. The secretary attends to the office work, handles correspondence, answers queries, keeps records, and one important matter, collects from all the ministers of the worship, the birth, marriage and death certificates, makes corrections on them, if necessary, takes a copy of each, and sends them to our Division of Vital Statistics in Quebec.

We have considered it advisable to establish five or six Health Units in as many counties of our province for the first two years, as a demonstration, trusting that this system, wherever it will be fairly tried, will reduce considerably the mortality from infectious diseases, tuberculosis as well as the infant mortality. In fact, instead of attacking only one phase of the public health problem as it is necessary in our cities, through the dispensaries and the child welfare stations, this unit system attacks the problem in its entirety, takes up the whole question of general public health, with the expected result that, after a few years, the population will enjoy better living conditions, will take proper means to protect infancy and childhood, the period when tuberculosis is ordinarily contracted, with the consequence that this dread disease, together with many others, will be checked and gradually eliminated.

Such a system costs money, but it has been said, and said truly: public health is purchasable and purchasable with money. It is a matter of education, education of the governing bodies, and education of the people. And if the method proves to be sound, as we hope it will, nothing will prevent its extension, which will be requested by the population itself.

The minimum annual budget of the County Health Unit in our province various from $11,000 to $14,000. For the demonstration counties the Government has adopted the principle of contributing for half of the amount. It is our lot to find the other half, which is not always a small difficulty.

Fortunately, the Rockefeller Foundation has granted us a most generous help, and its contribution for the actually organized counties amounted, for the first year, to 25 per cent, and, in one instance, to nearly 35 per cent of the total cost. But, the Foundation, and rightly so, requires as a condition of its financial assistance, that the local authorities, the County Board, and the independent municipalities for instance, do their part. On the other hand, it has assumed all the expenses incurred for the field training of the medical officers and nurses appointed to take charge of the units; and, as a fact, our staffs so far have studied two or three months in the counties of the state of Ohio for that purpose.

I may say that we have met, from practically all the County Councils before which we have offered to explain our proposal, the most generous answer. They have voted a tax on the assessable properties of the whole county. I may be mistaken, and, if I am, I will be glad to be corrected, but I am under the impression that this is the first example in our country of a rural population taxing itself for public health purposes.

May I now be permitted to say a few words about the work accomplished in the first county which we have organized last year and where a Health Unit has been in operation since the 1st of May, 1926. This county is Beauce county, situated about 30 miles from Quebec city, having a wide area, and a

population of 45,000 people. Let me say, en passant, that in December, 1925, before the beginning of the organization, I obtained from the County Council, a first contribution of $500, with much difficulty, and only after an elaborate speech of over an hour. But, in December, 1926, the same council voted, after a quarter of an hour deliberation, $1,700 as its share for the maintenance of the unit which the mayors had seen at work during seven months only. This is the result of the education done by our staff. I have on hand the report of Dr. Deschenes, our health officer in Beauce county. It deals with all the activities of the Health Unit during the eight months from May to December, and particularly with the co-operation obtained from the clergy, the mayor, the school commissions, and the medical profession of the county. It gives special attention to the work done in the schools and to the meetings held in the various parishes attended by the young mothers. It refers to the lectures given to the 584 teachers during the summer vacation, to the 2,500 children who were vaccinated against smallpox during August, September and October, to the free distribution by the Provincial Bureau of Health of serums and vaccines to the physicians of the county, etc. The time at my disposal does not permit me to quote the report in full, but I think that a few figures drawn from it would be of interest to you. These are as follows:—

Public meetings	19
Attendance	9,338
Specimens of hygiene literature distributed	13,047
Hours of work in the office and outside	6,921
Number of miles covered with motorcars supplied by our service	14,497
Children examined, weighed and measured	3,003
Schools visited	95
Number of defects found in children	7,214
Number of advices given to parents	2,349
Cases referred to family physicians	2,767
Lectures to young mothers	54
Attendance	1,827
Lectures given to school teachers	30
Attendance	584
Public, semi-public and private water supplies inspected	47
Nuisances inspected and corrected	47
Public, semi-public and private sewerage systems inspected	28
Hotels inspected	18
Butchers' shops, bakeries and slaughtering houses inspected	37

These are a few figures indicating only a part of the work done during eight months in Beauce county by our Health Unit, and the work is continuing. One other unit began to function in August, 1926, in the two neighbouring counties of St. Jean and Iberville, which we deemed advisable to join together for the purpose, owing to their small area and population. And on the 1st of January, 1927, a new Unit began its work in the county of Lac St. Jean, one of the largest of the province and having a population of more than 45,000.

The neighbouring counties of St. Hyacinthe and Rouville, through their County Councils, have applied for the organization of a Health Unit and have, at the last meeting of these councils, imposed a tax for health purposes similar to that of the first counties. The county of Montcalm has acted in the same way, and the adjoining county of l'Assomption is going to follow at the end of this month. These two Health Units will be organized early this year and will function before long.

History repeats itself. What is now taking place in connection with the promotion of public health among the rural population of our province is exactly what we have seen regarding the policy of improved roads. At the beginning, many municipalities were reluctant in adopting that new policy and were not disposed to pay for its realization; now they are all applying to the Government for good roads, and they are offering to do their full share. I am convinced that the same will happen regarding public health, with, as a result, improvement of living conditions, saving of thousands of lives every year, prolongation of existence, and in a word, the betterment of our population.

The CHAIRMAN: We have all listened with great pleasure to the remarkable paper by Dr. Lessard describing what would seem to be an ideal organization for conducting health measures in rural districts.

Now, ladies and gentlemen, I think it would be well, as there are other speeches dealing with somewhat similar problems, if we should ask the readers to present their papers and then we could have a discussion. Unless there is any objection to that course, we shall follow it.

Next in order we should like to hear from Dr. McCullough on

WHAT WE SHOULD SPEND IN CANADA ON PUBLIC HEALTH

Dr. J. W. S. McCULLOUGH (Toronto): I should like, at the outset, to congratulate you, sir, on the very able address which you presented to this conference yesterday, and to congratulate you and the members of the conference on the success which has attended this, the second conference of the kind. I think there is no doubt that this conference is a means of great good for the medical profession and for public health, and other mattters of the kind in this country, and I am sure that it will be of continued value to the medical profession of this country that these conferences should be continued.

I should also like to congratulate Dr. Lessard for his splendid address on County Health Organization. That is a subject to which I have personally given a great deal of attention during the last five or six years, and I have always made myself a nuisance at meetings of this kind in advocating a system somewhat similar to that which is being put into operation in Quebec.

The original County Health system began with a combined area system in England; where a county, or perhaps half a county, or in other words a combination of municipalities is grouped together for public health purposes. The trouble with us in this country is that our unit of public health, which is the municipality, particularly in the smaller urban areas, and in the rural areas, is too small and too poor to be able properly to carry on public health work. The consequence is that the municipality in the small town or village must be content with the practising physician who gives his time for little or no remuneration to the purposes of public health. The result is the part time medical officer of health, in this country and in the United States and wherever it has been tried, has proven a failure. There are a few examples, I know, in the province of Ontario, with which area I am much bettter acquainted than in other provinces, where part time medical officers of health have given very fine service to their communities but at personal sacrifice—a sacrifice of their time, which they would otherwise devote to making money out of their profession, and entirely a sacrifice of their own interests. The only way in which we can succeed in having a proper development of public health all over the country is through a system where we have a full time medical officer of health, and a full time organization, such as I am happy to see is being established in the province of Quebec. I have not been successful in having this system adopted in Ontario, and I think I shall have to import some of the eloquence of Dr. Lessard.

In addition to having full time health organization, the next essential is that we shall have the necessary money for the purpose. The short paper which I purpose reading this morning refers to that side of the question; that is, how much money we should spend on public health in this country.

The foremost among public health administrators agree that $2.50 per head of population is the necessary annual sum for the adequate promotion of the public health. Upon this basis Canada, with a population of between nine and ten millions, should spend for public health upwards of twenty millions annually.

Under the British North America Act, the constitution of Canada, the duty of the care of the health of our people properly belongs to the Dominion Government, but since Confederation this duty has been shelved on the provinces and the municipalities.

One reason for this was that in the days following Confederation, the need for some more local organization, as well as the imminent danger of cholera, yellow fever and typhus, stimulated the provinces to do something for their own health protection. Another reason was the indifference of the Dominion authorities. With the exception of providing for quarantine against the foreign invasion of disease, practically little or no steps had been taken by the Government of Canada in the care of the public health until the establishment of the Ministry of Health in 1919.

The appropriation of the Dominion Department of Health for 1926 totals $935,222. Of this sum $140,000 goes to the upkeep of Marine Hospitals, $64,000 for Civil Government and $80,000 for medical inspection of immigrants. The balance, $751,000, including as it does grants for tuberculosis, the Social Hygiene Council, the Child Welfare Association, Venereal Disease Control, for administration of Food and Drug Acts, pollution of inland waters, quarantine and the Laboratory of Hygiene, may fairly be credited to the public health side. This sum amounts roughly to 7½ cents per head of Canada's population.

The public health expenditures of the provinces aggregate a little more than one and a half millions and the municipalities about the same, so that from all sources the total expenditures on public health of Canada are about $3,750,000, or 37½ cents per head, leaving a wide margin between the necessary and actual outlay for this purpose.

Human capital is the greatest of all our resources. It is the greatest asset of our nation. Taken person for person the native individual human capital is perhaps equal to, if not more valuable than any imported product. It is within our power as a nation to conserve that capital, to increase its vitality, lengthen its earning power and thereby add to its value.

Dr. Louis Dublin, of New York, has, with some success, made an attempt to estimate in terms of money the value of life and health. This perhaps is the least important way to look at the question; but it has, at least, the merit of being practical and in this way should appeal to the taxpayer. Dublin lays down the principle that this evaluation should be based upon, first: the cost to maintain a life from birth to 18 years—the time of beginning productivity, and second: the productive value of that life.

Without bothering you with details it has been determined that it costs to bring up a child—say in a family with an annual income of $2,500, for food, clothing, shelter and education, $7,238, and if to this were added the interest on capital and allowance for the cost of those who did not survive 18 years, the total expense of rearing a child would be about $10,000. The child of 18 is then the capital whose productivity may be estimated. In the same group this estimate is $41,000 and the coincident expense $13,000, leaving net future earnings of $29,000.

The economic value of a child at birth is $9,333. This is the sum which at 3½ per cent will afford the income sufficient to maintain a child to 18 years and to produce the net income throughout the working period of life.

If the family income were $5,000, the net future earnings of a man of 18 in this group was found to be $49,100. Striking an average it will be found that about $39,000 will be the present worth of the productivity of our males of 18 years. Consequently the productive value of the five million male persons in Canada is one hundred and ninety-three billions of dollars or about five times our tangible material resources.

Professor Nicholson, as far back as 1891, estimated that the living capital of the United Kingdom was five times that of all other capital. It may therefore safely be asserted that the human resources are five times those of the material resources of the country. It seems worth while to take care of such an asset.

The cost of sickness, much of which is preventible, is very great. That of Canada is conservatively estimated at 270 millions a year. Two per cent of the population is sick all the time; consequently there is a continuous loss of 2 per cent of the total current production, and as the average loss of time from illness is about seven days a year, the total loss for the male and female workers is about 21,800,000 days' work. A low estimate of the daily pay of these persons averages $3, so that the cost of sickness among workers totals over sixty millions. The capital expenditure in our hospitals reached, in the days when costs of the kind were comparatively low, about one hundred and eighty millions. The 60,000 beds in our hospitals incur an annual upkeep expense of another sixty millions. Mothers' allowances in Ontario alone total two millions a year, one-eighth of which is on account of tuberculosis in the family. In the same province six millions are spent for Workmen's Compensation, for illness, accident and death claims.

Fifteen thousand babies die each year in Canada—34 per cent of them in the first week of life. Take the infant mortality returns which reach the Health Department of the various provinces, and it will be found that the greatest cause of death in the early weeks of life is pre-maturity—the baby had not the growth and vitality which a strong mother would have afforded. The pre-natal care of mothers is a vital necessity to the baby as well as its mother. There is no reason for this slaughter except the ignorance of mothers and the indifference of the countries where they live.

Canada is the only civilized country of any account which (with the exception of the province of Saskatchewan) has no maternity benefit. Great Britain and most of the British dominions, nearly all the countries of Europe and even Russia provide a maternity benefit for the mother. In Australia, every mother, regardless of her class, and also unmarried mothers, receive five pounds on the birth of a baby. In consequence of this benefit, it has been found that, while the benefit did not reflect any improvement in maternal mortality, it produced a vast saving of infant lives, and in Australia and New Zealand are seen the lowest infant mortality rates and the highest expectation of life to be found anywhere.

It is not advocated that the governments—Dominion, provincial and municipal—should at once appropriate twenty millions for public health purposes. But this is the goal towards which our faces should be set. It costs money to maintain the public health.

One insurance company, doing business in the United States and Canada, spent twenty millions in the last 17 years in promoting the health of its policyholders, and this company advertises that this expenditure gave a return of forty-three millions.

Most of the insurance companies spend considerable sums in the same direction, and as you know, one Canadian company grants $30,000 for the promotion of post-graduate education among the medical men of Canada.

The greater cities of our country have found that the organization of whole-time health departments has been effective in lowering the death rate. New York's death rate in 1875 was 28.3 per 1,000; in 1925 it was 11.5—a reduction of 59.4 per cent. The same results will be found wherever money is freely spent in public health work.

In the last 20 years the infant death rate of cities has been cut 60 per cent. In Ontario the typhoid rate has dropped from 50.3 per 100,000 population, to 3.5, and there are complaints from the medical colleges that there is not sufficient material of this kind to provide clinical instruction for students.

With increased length of life, long and debilitating illness is less frequent and economic production highest. Under such conditions there is less poverty and this condition in turn increases the health and comfort of a people.

The ravages of illness cost more in money, loss of time, and illness than the greatest of wars. Prevention of disease and prolongation of life will correspondingly increase prosperity, not only among our own people, but for all who trade with us. There can be no higher service to one's country than the endeavour, by all legitimate means to foster the public health. It will pay from every point of view. The money wisely spent in this direction is the nation's best investment.

The CHAIRMAN: I shall now ask Dr. G. Stewart Cameron to read a paper on

THE NURSING PROBLEM

Dr. G. STEWART CAMERON (Peterborough): Mr. Chairman, ladies and gentlemen, I would like to preface this paper by a remark or two. At the meeting of the Council of the Canadian Medical Association in Victoria last year, Dr. Bazin of Montreal was made chairman of a committee and empowered to make a study of the nursing problem as we find it in Canada. Dr. Bazin had begun this work but, unfortunately, he was taken ill and at the present time is, I believe, in California convalescing. Before leaving, he very kindly turned over to me the material which he had collected, and some of that material has been used by me in the preparation of the few remarks which I intend to make.

When your committee asked me to prepare a paper dealing with some of the problems confronting the nursing associations as they relate to medicine, I believed the effort would not be difficult, but the more one delves into the subject, the more complicated and far-reaching it becomes. May I ask your indulgence, therefore, if I hurriedly pass from one topic to another that I may attempt to present the salient points in this very important subject.

Last August, as the representative of the Canadian Medical Association, I had the pleasure of attending the Annual Convention of the Canadian Nurses' Association, held in the city of Ottawa. Needless to say, I was delightfully entertained by the Association and more than amazed at their numerical strength. There were registered in Ottawa over seven hundred and fifty nurses from all sections of Canada. In addition, representatives were present from different parts of the United States and from the United Kingdom. Perhaps the unveiling of the splendid tablet erected by the nurses of Canada as a memorial to those, of their number, who had given their lives in the Great War, had something to do with the large gathering. The presence of Dame Maude McCarthy, representing the nurses of the Motherland and typifying in herself the splendid character of the British nurses, no doubt attracted many. All this had something to do with the large gathering, but when one saw the splendid spirit that prevailed among them, one could quite understand that special inducements were not necessary to procure a very representative meeting.

The first thought that struck me was the fact that this splendid organization had grown up in this country to its present proportions and influence without any real contact with the medical profession. Notwithstanding the fact they were all trained in hospitals under the direction of, and in close working contact with, physicians and surgeons, yet, in their national organization, and I think I am right in saying, that in their provincial organizations, they have

no official connection with the profession with which they are so closely related. Naturally one asks, "Why is this?" Many answers are forthcoming, some of which might be disquieting, if we did not have a confident belief in the aggregate good sense and fairmindedness of those who are directly or indirectly responsible for the care of the sick. I am sure that a mutual basis of understanding exists and that, with a little patience, an adequate knowledge of the facts and a clear vision, we can reach that goal and build thereon a structure that will co-relate and fairly appraise all these factors which enter into the practice of medicine in its best and widest sense. As a constructive point in this direction, may I direct your attention to a resolution passed at the recent meeting of the Canadian Nurses' Association, appointing a committee to consider closer relationship between the Canadian Medical Association and organized nursing.

In presenting to you some of the nursing problems as they appear to me, I would first ask you to follow briefly with me the development of nursing, as it is practised in Canada to-day. Nursing was introduced into this country, I presume, by the Religious Orders, many, many years ago and was entirely in their hands until quite recent years. If we examine the history of this profession, we will find that it has made its advances along lines parallel to the advances made in medicine, so that from the first the trained nurse has been the assistant of the physician in the care of the sick. It is not so many years ago that hospitals were comparatively few and usually confined to the larger centres of population. Nursing at this time was looked upon as the correct work for many young women of education and refinement; consequently our hospitals, in place of industriously seeking for undergraduates, found them clamouring to be accepted. The work in the hospitals during these earlier years was largely confined to various forms of housekeeping and the administration of medicines in abundance. Surgery, and all that is embraced in the word, had comparatively little place in our earlier hospitals. As time went on, however, the rapid and revolutionary advances made in medical science demanded quite different service from the nursing staff, and so it has been down through the years, step by step, with the expansion of medicine new obligations and new responsibilities were placed upon the hospitals and those responsible for the nursing service. Hospitals, from an economic standpoint at least, were very glad to accept young women as pupil nurses because it solved, in a very large measure, the expense of the actual nursing of the patients. There is another point which we must not lose sight of at this time, namely, the fact that there were comparatively few trained nurses in the country and that hospitals were really compelled to prepare their own nursing staffs. As hospitals increased in number, so did training schools, and I think we may say that wherever a new hospital came into existence, a training school for nurses was established. As the years passed, it was found that the curriculum of study in these various schools differed a great deal. The preliminary educational requirements were as varied as the curricula. With the advances in medicine, new duties and new responsibilities were placed upon the nurses, and those directing the training of these young women felt that increased medical education must be given so that they might render the most efficient service to the patients in the wards under the direction of the physician. In the earlier days of the training schools, the theoretical work was given very largely by the medical staff. The arrangement of subjects and the extent of the studies was left entirely to the Superintendent of Nurses. Naturally the standard of requirement varied according to the ambitions of those in charge of nursing school, and with the demands made upon the nursing staff by the physicians and surgeons in attendance at the hospital.

Experience gradually taught that some attempt should be made to standardize the teaching in the various hospitals throughout the country. It was felt that if uniform preliminary educational requirements could be secured, it would be a great benefit to both the students and the teachers. Secondly that some minimum standard of theoretical and practical instruction should be insisted upon and that competent instructresses, particularly in the classroom and the ward, should be secured. To most of us, it seemed really a very reasonable step but it is somewhat surprising to find that in some of our provinces, many years passed before the necessary legislation was secured. To-day, I am glad to say, all the provinces with the exception of Prince Edward Island, either have, or will have in the very near future, special legislation setting forth the minimum preliminary education necessary and the minimum requirements for a graduate nurse to be admitted to the provincial examinations after which, if she is successful, she is granted the diploma of Registered Nurse. Thus, we have attempted to sketch very briefly the history of nursing in Canada from its inception down to the present.

With this historical background in mind, we can readily see the very rapid developments that have taken place and with these developments many difficulties and problems have arisen. It is to these problems that the leaders of nursing throughout Canada are, at the present time, devoting a great deal of their attention, and it is because of these difficulties that some of our misunderstandings have developed.

First of all, as to the nurse herself. We have heard a great deal of comment upon the division of their hours of duty. In most hospitals, twenty-four hour duty is not permitted. Some of us, many of us perhaps, felt that this was not a wise step on the part of the nurses as it increased the financial burden, to a very great extent, upon those who were so unfortunate as to require the services of a trained nurse. That is quite true, but, on the other hand, is it quite fair to expect that a nurse's hours of duty should be longer, by a considerable degree, than those required in any other service in the country, excepting perhaps domestic service. I think the time has come when we will have to recognize that the nurse is as much entitled to her regular hours of duty as the workmen in any other employment. The care of the sick, from the nursing standpoint, will have to be met in some other way than placing an unfair burden upon the nurse. Here then we come into contact with one of the big problems with which nursing organizations are wrestling to-day. It would appear to me that, from an economic standpoint, it will always be impossible to provide the public with full-time bedside nursing done by graduates. One of the alternatives, therefore, which is being tried is that of hourly nursing, that is, a nursing service somewhat along the lines attempted by the Victoria Order of Nurses only extended to paying patients. Under this plan, a graduate nurse visits, during her hours of duty, a certain number of patients. She does what work is necessary for a graduate nurse to do and gives instruction to some person in the household responsible for the care of the patient between the visits of the nurse. It has been found that in a number of cases this is a very satisfactory plan, and as the cost of the visiting nurse is divided among a number of families, the expense is comparatively light upon each.

This plan of hourly nursing would require a central registry where nurses, sufficient in number to care for the work attempted, register, and it is to this registry the doctor turns when he requires the services of a part-time nurse.

The above system presupposes some person in the home capable and willing of carrying out, in the intervals between her visits, the instructions left by the nurse. The providing of this woman is a matter that is receiving a good deal of attention from various public service organizations as well as from nursing

groups. The question is one of domestic help as well as nursing care—how best to attract the right kind of pupils, train them for the service required and then successfully introduce them to the public, is something that requires time and much study. Might I suggest, for consideration, that the experiment being tried by the Red Cross in Toronto—that of providing visiting housekeepers—might be extended to include such instruction in the care of the sick as would enable the housekeeper to give the required attention to the patient in the intervals between the nurse's visits. If an experiment of this kind should prove applicable in a wider sense, might it not point the way to a solution of the practical nurse problem.

A method of group nursing has been introduced in some hospitals in the United States and, from what I can learn, is proving fairly satisfactory. Under this plan the hospital engages the nurse on a salary and then sells to the patient her services for the number of hours of attendance required. I believe there are difficulties in the way of carrying out this form of nursing but it unquestionably offers splended advantages to the public and I think should be very thoroughly investigated before we pronounce upon it finally.

Following the general lines of community welfare, we have that of Public Health Nursing, a work that has become very popular in the last ten years. The great impetus that was given to preventive medicine by the war has been responsible, in no small degree, for the fairly rapid expansion of this important work on a peace-time basis. The Federal Government has organized a Department of Public Health, over which presides a minister of the Crown. In several of the provinces, the matter of public health is recognized to the extent of having a Portfolio allotted to this particular work or else being an important department under a minister with divided duties. This expansion has offered a great deal of work for the nursing profession and is perhaps to-day the most promising and popular field into which go our graduate nurses. We might, for convenience sake, group under this head all those nursing activities which have to do with school nursing, immigration inspection, tuberculous nursing, and other forms of community work done under health organizations such as baby clinics, Farmers' Institutes and the various welfare and public service organizations found in many parts of the country. The varied and widespread attempts at a service of this kind show the general need and, furthermore, the necessity for careful organization of these activities so as to prevent overlapping and the needless waste of effort and money. When we stop to consider the multitudinous activities which devolve upon the public health nurse, we quite believe that her training cannot be too varied or too comprehensive. She is not only to be a nurse but she requires a knowledge of practical public health work, hygiene, housing conditions, a knowledge of clinical medicine, surgery and obstetrics, and an abundance of tact and diplomacy to manage the public among whom she is going to work. It naturally follows that the nurse to be possessed with such qualifications requires a training somewhat different to the nurse who is going to remain in private duty, or who is going to devote her time to executive or institutional work. This fact has been recognized by our educationists, working in co-operation with the teachers of nursing, to the end that we have established in several of our universities a Department of Public Health Nursing extending over four years and covering the field which I have above indicated. These courses may not be perfect but they are a beginning and no doubt with time and the co-operation of the various units interested, this department of hospital and university instruction will become a considerable factor in public health education.

There is a point just here which was rather impressed upon me at the Ottawa convention—that is, the attitude of the medical profession towards the public health nurse. There seemed to be a feeling, and perhaps justly so, that the

profession was not kindly disposed towards the innovation, and that the nurse found considerable difficulty in getting a start in the community because of the unfriendliness of the doctors. Medical men present, who have a considerable knowledge of general practice, will admit that there is a good deal of truth in this, but, as I replied to the nurses at the time, Public Health work is comparatively new. It dates back only some ten or twelve years. The medical profession is notoriously conservative and time is very necessary in securing the profession's help and co-operation. Some of the older physicians may never accept the idea of the public health nurse. But the younger men, if they are given a proper understanding of public health work in their university course, should go out to their fields of labour prepared to co-operate with the service supplied. On the other hand, we, as a profession know, that the nurses have not always been of the diplomatic kind. In some instances, when a little tact and persuasion would have won the day, the nurse rather tried to demonstrate the superiority of her knowledge and position. The above statements only go to show that if the public health nurse or the community nurse is to be successful, the very highest type of women must be selected and, further, that she cannot be too carefully trained in the work in which she is to engage. Any difference of opinion that exists can be readily removed if there is a frank interchange of ideas among the various parties affected by this comparatively new work. It is a development that is bound to increase and constantly offers a widening field for nursing activities. It is important, therefore, that the scope of the nurse should be carefully determined; the system sympathetically explained to the physician and his intelligent co-operation secured, if the best results are to follow.

The extent to which the undergraduate should be taught public health work appears to be a matter of considerable moment and quite varied beliefs are held by different teachers. Personally I do not think that the undergraduate nurse should be given more than an intelligent knowledge of public health teaching. The pupil nurse in our training schools is being taught to care for the actually ill; in other words she is being trained for private duty whether it be in the hospital or in the home. To my mind there is a distinct difference between the nurse who is going to remain in private duty and the one who is going to do public health work and we should not confuse the two.

If a nurse, after she has completed her undergraduate study in an approved training school, desires to engage in public health nursing, a means is provided whereby she can secure a post-graduate course in one of our universities, and this, in addition to her hospital training, qualifies her for a variety of public health appointments. On the other hand, if she is going to do private duty work, I see no reason for burdening her mind with unnecessary public health problems.

Furthermore, if it should be her wish to devote all her time to some special type of private duty work or, on the other hand, if her peculiar abilities attract her to administrative or instructional duty, we should see that our educational system makes the necessary provision. In this way trained executives and teachers would be provided for our hospitals.

This brings us to a consideration of the training schools. We remarked in the forepart of our paper that as soon as an hospital was established, invariably a training school was organized. You will agree with me that under such conditions the opportunities for training a nurse vary very greatly. We have in Canada a large number of hospitals with from fifteen to twenty-five beds with one graduate nurse in charge. We have many hospitals under 50 beds with perhaps two graduates directing the management of the hospital and training the pupils. Considering the magnitude of our country, we have comparatively few hospitals of over one hundred beds. I mention this simply

to show the limited facilities many training schools have for teaching and the limited opportunities the students enjoy of seeing a large variety of clinical material. Mark you, I am not criticising the instruction, simply the facilities and opportunities offered. Here then is another problem which the nursing groups throughout Canada are endeavouring to solve. It is a question for serious consideration, whether training schools should be continued in hospitals of twenty-five beds and under. The most popular as well as the most potent argument in their favour is one of economy. If pupil nurses are not employed, we are led to believe the hospital would have grave trouble in carrying on. From some very interesting figures secured from Dr. Fred Routley, General Secretary of the Ontario Red Cross, I gather that this conclusion needs careful reconsideration. He compares fourteen hospitals averaging eighteen beds each and having a training school with fourteen hospitals carrying an equal number of beds and no training schools. The deduction shows practically no difference in the cost per diem per patient; the exact figures being, with schools $3.37, and without schools $3.39. If it can be shown that this is substantially correct, when dealing with the large majority of small hospitals, I suggest that the chief argument in favour of the small hospital—that of economy—loses its force; that being the case, is there any good reason why the small training school should continue to teach and graduate nurses. Thorough investigation of this whole subject, in so far as Canada is concerned, might show that hospitals of much larger capacity could be better and just as economically managed without training schools. Continuing this reasoning, if we could place in a non-training school group all hospitals of say thirty-five beds and under, we would open up a considerable additional field for the graduate in private and institutional work. On the other hand, we would eliminate from the graduate ranks many of those who were trained formerly in the small hospital. The net result should be extremely beneficial to the patients and incidentally to the nursing profession.

Could we not then make a genuine attempt to grade or standardize the remaining schools? Have a minimum educational requirement for entrance, a uniform curriculum properly apportioned to wards and class-room study. Further the training school should have a minimum number of graduate nurses trained for ward teaching and academic instruction. We believe this would be absolutely necessary if a proper balance is to be maintained between the theoretical instruction and the practical application at the bedside. Only with sufficient instructresses can the students be checked up on their practical work, which should at all times take a commanding place in their course. Lastly there should be supplied suitable accommodation for their study, in the way of class-rooms, library, and living quarters.

Another interesting phase of this question is the exchange of nurses, for training purposes, between hospitals doing distinctly different types of work. We have, besides general hospitals, in many of our larger centres hospitals exclusively devoted to the care of contagious diseases, tuberculous disease, diseases of children, etc. Or it may be that the general hospital leaves to the special hospital the care of those who require the treatment given in these special institutions. In some places, the exchange of nurses has been in operation for some time and I believe is giving a fair degree of satisfaction both to the hospitals and to the students. This is a field that should offer opportunities for much development. I submit that no nurse should graduate without being familiar with the nursing of contagious diseases and the nursing and care of children, particularly if she is going to do private duty.

While travelling in the West last summer, we heard a good deal of discussion about hospitals and the position of the graduate nurse when she sought employment among our neighbours to the south. This same question was

encountered in the East. Apparently it has had considerable to do with the development of our training schools. I am not familiar with all the aspects of this case but in a general way I would say that the primary duty of Canadian hospitals, and training schools, is the care of those committed to them for treatment; that the education of the nurse should be along lines that would be suited to Canadian service. I think the question is analogous to the development of our medical colleges. Had we in days gone by looked outside ourselves for guidance, I doubt very much if medical education in this country would to-day hold the enviable position which it does. Can we not organize and develop our training schools to such a degree of perfection that our graduates will receive unquestioned standing wherever they go?

I have no doubt that you will wonder in your own minds who is going to pay for all this. Quite true, and this is where the medical and nursing staffs come into direct contact with the hospital boards. It is for this reason that there should be very close co-operation among the three units. In many of the hospitals in Canada, the board represents the taxpayers, hence our hospital boards will be, to a considerable extent, governed in their actions by what they believe to be the desire of their constituents. If we stop for a moment we will see that these very constituents may become patients in the hospitals, and the better they make the hospitals and all that enters into their management, the better will they be cared for when sickness overtakes them. If systematic and intelligent education of the public is carried on with regard to the needs of the modern hospital, I have little fear for the verdict of the taxpayer. In this fair land there are taxes at which we shy, but I venture to say that it is the rare exception for an intelligent appeal for hospital funds to receive a negative response.

There are many other points about which I would like to speak, but time and your patience have been lenient; to the discussion, therefore, I leave these.

In conclusion may I say that in making a study of this subject we must take a broad and comprehensive view. We should endeavour to bring together representatives of the Canadian Nurses' Association representing organized nursing; representatives of the Canadian Medical Association and representatives from the Association of French Physicians and Surgeons. A third group that must be included is the Provincial Hospital Associations, or, if no such association exists in a province, then representatives from the boards of some of their representative hospitals. These bodies are primarily interested in the case of the sick and the work which they do is all focussed on the patient. With these groups as a nucleus, other associations could be approached for information or assistance, whether in Canada or elsewhere, and a reciprocal interchange of ideas and plans introduced, that would be of great benefit to all. Here, as elsewhere, many bodies secular as well as scientific are interested in the prolongation of human life and the care of the sick but so far there has been little co-relation of their efforts. As a member of a profession with a comparatively long history in Canada, might I suggest that the Canadian Medical Association act as sponsor for this idea; that it take the responsibility for inviting these groups to a conference, say at the Canadian Medical Association meeting in Toronto in June, with a view of organizing such a study.

This will not be a simple matter. The sparseness of our population, together with the great distances, make frequent meetings impossible. I, therefore, think that out of a general discussion, such as we might have in June, definite plans could be evolved for gathering ideas, opinions and data, in general, which could be discussed and co-related at a number of zoned meetings held at suitable points throughout Canada. At a general conference convened at a future date, the deliberations and conclusions of these meetings would be presented. The general conference could then formulate specific plans which might be sent on

to the original groups composing the conference for their individual consideration, after which the reports of the individual groups could be considered by the conference. If a reasonable unanimity was found to exist, recommendations, based on this unanimous approval, might be forwarded to provincial bodies, having judicial authority, for their action. To successfully conduct such an investigation funds would be necessary. Again the Canadian Medical Association might be approached with a request that they consider ways and means of financing the undertaking.

I have been specific in my recommendations for this joint meeting because, judging from the letters and literature which I have received from all parts of Canada, there is a great deal of unrest and just a little tendency for some long range firing among the groups directly interested; hence the sooner we can get the study under way to the satisfaction of all, the nearer we will be to an amicable solution.

The CHAIRMAN: I shall now ask Dr. Ramsay of London, Ont., to read a paper on—

PERIODIC PHYSICAL EXAMINATIONS OF THOSE WHO ARE APPARENTLY WELL

Dr. GEO. A. RAMSAY: The following remarks are in the nature of a preliminary report of the Inter-relations Committee of the Ontario Medical Association, and are in no wise the expression of individual personal opinion. The subject of "Periodic Physical Examination of the Apparently Well" was passed to our committee for study and the premises on which its importance was accepted are as follows:—

1. A certain demand has recently arisen for such service.

2. The demand is apparently increasing as evidenced by successful commercial enterprises who cater to it.

3. The demand comes from the following groups:—

(*a*) Individuals who have a desire to know their position in regard to physical fitness.

(*b*) Insurance companies who encourage their policy-holders to become such as are described in the preceding class. The prime object of the insurance companies is to better their own position by bettering that of the policyholder.

(*c*) Industrial concerns who request such examination as an entrance requirement and also in a few cases the yearly re-examination of those employees who occupy key positions.

4. Periodic physical examinations are within the scope of the family physician and should be satisfactorily carried out by him.

5. This movement is worthy of the greatest support and development by organized medicine with the following as established principles:

(*a*) A gradual growth is to be preferred rather than any artificially stimulated or revolutionary development.

(*b*) This development should be evolved from within the profession and controlled by its responsible organizations.

(*c*) Permanent popularity will begin with desirable publicity given to the benefits that may be expected from periodic physical examination.

Regarding publicity, this Inter-relations Committee approve of such established procedures as the following:—

(*a*) The practice of certain manufacturers of sick room supplies in enclosing a suggestion slip that a yearly physical examination is a desirable procedure.

(*b*) The Birthday Health Examination propaganda of the American College of Surgeons.

(*c*) High-class articles appearing in certain magazines and publications over the signature of responsible medical authors.

(*d*) Extension of the system of examination of school children as done in London by their family physician, rather than a school medical officer. This is to the end that the procedure instituted on entrance to school and repeated at intervals might become with some, at least, a habit to follow in later life.

(*e*) The type of advertising as done by certain insurance companies who project the need of frequent physical examination as a protective measure.

On the other hand, we do not endorse considerable of the syndicated health talks of daily newspapers, since many of these are lacking in authority and the subject matter frequently is unsuitable ground for contact and liaison between the profession and the reading public.

We deprecate the fact that many enquirers do not know where or how such services as a satisfactory periodic health examination might be procured in Canada. Likewise that certain commercial Health Bureaus obtain a large fee for inadequate service. As an example, one agency gives the service of a quarterly urinalysis and cater to business men especially. The yearly fee of $15 which is exacted appears to be the reward of commercial enterprise and high pressure salesmanship on their part and a penalty of natural indifference on the part of the same business man, who might be your particular patient, and had been asked by you to do this very same thing. Service is a magic word in the modern world. It is rather a reflection on someone that this same man does not know that he can obtain through his own physician a greater service at a moiety of the price he now pays. Publicity is the remedy for such ills as these. However, we ask you to strike the trial balance of value received for your business man patient.

In hoping to advise constructively, we are prepared to recommend to our provincial association that, as an initial step, a sum of money be expended in placing before the reading public a series of responsible articles concerning the part that medicine has played and must continue to effect in the progress of our civilization. To exemplify this point of desirable initial publicity a reasonable point of contact would concern the " mountain peaks " of preventive medicine—such as described in Osler's Romance of Medicine. This type of article would be acceptable to the reading public and therefore this would be the standard of style and subject-matter. Such articles would be controlled entirely by the Inter-relations Committee. Concerning publicity as affecting periodic health examinations, it is reasonable to suppose that suitable articles will popularize the subject. There is a demand for such, otherwise magazine publishers of the present day would not give them space.

Further we believe that the existing machinery of Government departments should be used to better advantage and they might be requested to form a Speakers' Bureau, employing certain of the full-time health officers. We are of the opinion that the federal and provincial departments would give such requests a sympathetic consideration since, without efficient man power, the fundamental wealth of forest, farm, sea, and mines cannot be developed to full

advantage. If then periodic health examination could enhance the man power of the nation, this form of medical service assumes the dignity of national economics and in time would be worthy of wide extension when adequate financing of the same is effected. In all things it is a question of economics, and the basis of satisfactory economics is the maintenance of the law of supply and demand.

Reverting to the possible co-operation that might be expected from the Health Departments of Provincial and Federal Government, we are given to understand that they have a certain supply of professional men who might speak authoritatively to public audiences on health subjects. It would devolve on other agencies to create the demand and this might well be our business.

The Universities might consider a similar scope to their Extension lectures and include periodic health examinations and other phases of preventive medicine on their program.

These proposals do not exclude the role of the private practitioner as he may see fit to exercise it in local activities, or in individual advice, as when a word in season to a client convalescent from serious illness might result in the consideration of a regular physical examination thereafter. But we do not advise that the practising physician is the person to embark on any formal scheme of organized publicity. We believe that he will heartily support a properly conducted campaign that will make his motives better known and understood, to the end that the medical profession as a whole may contribute their full quota to the development and advance of the nation. Certain it is that time brings on many changes in the relative position of physician and public opinion. Dean Inge has recently urged that the medical profession speak forth from their proverbial silence without fear of being unethical, and has offered to share his pulpit with the health officer. This project is not new in England and is a yearly event in the church calendar of more than one diocese.

Premising that periodic health examinations may be a considerable futurity in medical practice, what are the indications for our preparation to meet the duty?

Among the present generation of general practitioners, it is to develop the idea, and, like charity, to begin at home. By the use of an acceptable outline he will establish a comprehensive, orderly technique that will neglect no part and will supplement it by his experience of the individual's past constitutional disturbances. Thus the family physician may do better than can be done in formal clinics. This was probably the primary idea. Most of all we must appreciate fully the psychology of the patient who desires a frank answer to the question: "Am I all right?" Rather a frivolous assurance that the request is an unnecessary one or even the imputation that it verges on the intro-spection of the nuerasthenic.

The universities and teaching bodies will be responsible that the student generation will be as interested in finding fitness as in recognizing disease. To do the latter they must start with normalcy and analyze departures therefrom. Clinical material is thus augmented by the inclusion of class-mates. It is reasonable to suppose that junior clinical students might begin their quest by formal physical examinations of their fellows and from the outset take seriously the business and importance of periodic physical examination. This would result in degree being a guarantee to the public that the graduate was as well equipped in this particular as in conducting a maternity case. This is the assurance that is desired by those insurance companies who are at present most active in projecting the service.

To be quite candid we have the statement of representative insurance men that just as soon as they know that the money they are prepared to spend on periodic physical examinations of their policyholders will purchase careful

examination and balanced opinion, then they are ready to go far in that direction. At the moment they are waiting for the initial move to come from us. It would appear then that the university boards should work in close conjunction with the Canadian and Provincial Medical Association to give this assurance a tangible backing.

General

If the London group forming the Inter-relations Committee might have the favour of your advice in making this subject more than a local expression of opinion, I would ask that your discussion cover the following questions:—

1. Are periodic physical examinations approved as a desirable medical service worthy of extension?
2. Do you approve of publicity to effect this?
3. Should the central associations of organized medicine enter actively into this field as a clearing house of supply and demand for the service?
4. Last, how is this service to be obtained?

The Chairman: Before I call upon the next speaker, I may call attention to the fact that there are one or two suggestions made by speakers regarding which they might think it wise to secure co-operation on the part of this conference, or action by the Canadian Medical Association, and so on. I therefore ask readers of papers, if they have any resolutions to put before this Conference that they should write them out and put them on the table to be handed over to Dr. Poole, Chairman of the Resolutions Committee, for consideration by that committee.

The last paper in this series is by Dr. Grant Fleming of Montreal on

POPULAR HEALTH EDUCATION OF THE GENERAL PUBLIC BY THE MEDICAL PROFESSION

Dr. A. Grant Fleming (Montreal): We have many evidences that the general public is interested in learning about health. Their interest is generally of a negative character—the avoidance of disease—and it is of course open to argument how many of them are influenced in their daily lives by the knowledge they acquire.

I think that we may fairly well assume that the daily press and magazines would not devote the space they do to health articles unless the editors were satisfied that there is a public demand for such articles. They are capable of judging what the public wants and so, I think, we may accept their conclusions.

As to the effect of health education upon the general public, that is outside the scope of this paper, but it does seem that as health knowledge filters through, it must slowly but surely have an effect. Not that I believe many people do things to secure health just for the sake of health, but rather because they find that health practices make life more comfortable, more enjoyable.

The ever-increasing number of open bedroom windows attests to the spread of health knowledge concerning the value of sleeping in a well-ventilated room. It began with the anti-tuberculosis movement which was essentially one of popular education. Windows were first raised, no doubt, by those who sought, not health, but security against tuberculosis; they are kept up because it has been found more comfortable to sleep in a well-ventilated room, not because it is good for health.

The reason why one feels hopeful about health education is, first of all, because the things which we strive to teach are simple, easy to practice, and they do not cost money; and secondly, when put into practice, they make the individual more comfortable, and so he is likely to continue their practice.

If we accept the fact that there is a public demand for health knowledge, or accept the principle that it is desirable, the question at once arises as to how health education is to be given.

Unless the medical profession is willing to supply such education, the members are not in a position to criticize those who do. As health education is essentially medical knowledge concerning disease prevention and health promotion, it seems logical to expect the profession to take whatever steps are necessary to see that the knowledge which would benefit the public reaches them in an understandable, authoritative manner.

There are two types of health education—general and personal. The latter, which has to do with the instruction of the individual, to meet his personal requirements as distinct from those that are general, is not considered here.

If the medical profession is willing to assume responsibility for popular health education, the question is: how are they to do it? It would appear that the best way would be through the existing medical organization; in Canada, the Canadian Medical Association. The association might very well assume responsibility for issuing a weekly press article in the name of the association on health subjects.

Such an article would be authoritative and, as such, would impress that group of people who are influenced by what they read.

These articles, while refusing to lend themselves to controversy could be used to combat false teaching quietly and to place the facts, as the medical profession know them, before the public. There would be fewer sceptics about vaccination if its value were placed before the people once a year. There would be less argument about vivisection if the people were told what vivisection really is, what it has accomplished, and what it means to the world.

There are many excellent health publications now being issued by official and non-official health agencies in Canada. The Canadian Public Health Association has a committee which offers to pass upon the accuracy of such publications. The Canadian Medical Association might very well place their influence behind this in order to secure uniformity of teaching and accuracy of health publications.

A question worthy of consideration is whether or not there is a place for a modest popular monthly health magazine along the lines of *Hygeia*, issued in the United States. My own opinion is that it would be better to supply articles to popular magazines, because a much larger group of readers would thus be reached, compared with the limited circulation of a magazine devoted to health alone.

People ask questions. We have been told by newspapers and insurance companies of the numerous questions which come to their offices as a result of their publications. It is true that a large number of these are seeking advice as to diagnosis and treatment. It is, of course, difficult in any case to draw a sharp line between prevention and treatment, and I can see no objection to such a question as: "What should I do for a lump in my breast?"—as it gives the opportunity for urging the need of immediate medical care.

In general, I would suggest that the Canadian Medical Association, as part of the suggested news service, should conduct a bureau of inquiry where those seeking health advice could write and so be properly directed. On account of the difficulties of a central office being unfamiliar with local conditions, it might

be better to try to have the local or provincial societies answer such inquiries, or delegate a local health organization to do it for them; it being understood that any local service would be subject to central control.

I am satisfied that there is an urgent need for some authority to which people can turn. The official health departments could do it, but being official, they are not so free to do or say certain things, and some people are wary of the official. The chief advantage, however, would be that if this were done by the organized profession itself, it would not be subject to the criticism of individual members of the profession, as would almost certainly otherwise be the case.

It is not generally recognized by the profession that the need for health education exists. We know that first pregnancies are responsible for more than their share of sickness and death. How is the mother who is expecting her first baby to be reached and told about the need and value of ante-natal care? She has not had experience herself and she is likely unknown to any health agency. The only way is through general educational work. We may hope that in time to come all girls will be taught about this in school, but now the mother, pregnant for the first time, probably depends upon the advice of friends, not knowing where to turn for sound advice.

Then again, such general education would do much to check up the work of the careless members of the profession. The woman who has been told of the need for ante-natal care and who goes to her physician, expecting proper and regular examinations, will secure them or know the reason why. The important point is that she will secure proper supervision. After all, medicine is practised fairly well according to the demands of the people, and public health was initiated by and is chiefly to be credited to intelligent laymen with vision, who were prepared to use the medical knowledge made available to them by the profession.

Every chest specialist, every tuberculosis sanatorium, tells the same story of the comparatively small percentage of incipient cases which come to their attention. The need for ceaseless repetition of advice as to going to the doctor early, if not regularly, for a routine examination is evident. Would it not be wise to keep before the public the early symptoms of disease which indicate the need for medical advice?

It is hardly necessary to point out the need for instruction in the value of periodic health examinations by the family physician as a field that will require a great deal of popular education.

The mental hygienists are gradually securing facts concerning child training which will only be of value to the extent that they are made known to the general public. The general medical association can do this best, because, for one thing, they will not be suspected of being cranks who are biased in regard to the importance of their own special field work.

Should not the general public be told that there are no secrets in the medical profession? Should they not know that anyone who claims to possess some secret remedy is a fakir, and why?

The profession have certain responsibilities as citizens to do what they can to promote the efficiency of the race, particularly the children, by spreading health knowledge.

By popular health teaching from the central body, local communities would be instructed as to the value of an efficient health department, why money should be spent by such departments, why the health officer should be supported. Information as to the value of voluntary health organizations and the need of public support for them would come well from the profession.

If this were done, it would counteract the evil influence of a few members of the profession who, because of the fact that they are members of the profession, exercise an influence contrary to the opinion of 99 per cent of the profession.

It is not right that these misguided individuals should make statements which many people believe, just because the profession, as a whole, is now inarticulate, not having a regular educational service which would tell the people the truth.

In my opinion, it is the steady, quiet type of work that builds slowly but surely. For that reason, I am, in general, opposed to health shows, baby shows, health days, and such spectacular efforts, unless they are but the opening gun of a campaign which will be carried on over a period of time. They may be well suited for some places with which I am not familiar, but I am of the opinion that the Canadian Medical Association should confine itself to the more conservative procedures.

So far, what we have referred to would reach those who read. There are also those who are impressed by what they hear. If one of those rare individuals who possesses the ability to speak to lay audiences could be secured to lecture under the auspices of the Canadian Medical Association, it would be a desirable and valuable acquisition to the popular educational forces. It is a mistake to attempt popular lectures without a popular lecturer. The success of such a scheme would depend upon the local organizations entering into the scheme and making the necessary arrangements on the dates that the speaker would spend in their area.

There is no doubt but that such a speaker can leave an impress, particularly if he has had time to absorb some of the local problems and can deal with them in his address.

Consideration might also be given to the advisability of having one popular evening meeting as part of every medical congress. It is not so much the people who attend such meetings, but the publicity that can be secured, and so the ability to reach a large audience.

At the present, this is, I think, as far as the organized profession could reasonably expect to go.

Conclusions

To sum it up, there is a popular need and demand for health knowledge. The logical group to supply this is the medical profession. The best way to do it would be through the existing organization, the Canadian Medical Association.

The means suggested are: a weekly press article; an information bureau; articles for magazines rather than initiating a popular health magazine; popular addresses, providing a suitable lecturer could be found.

The Chairman: We have had a very interesting series of papers dealing with questions which are related to one another. Dr. Grant Fleming gave an interesting paper on Public Health Education, and Dr. Ramsay on the Periodic Physical Examinations of those who are apparently well. I am sure we all regret very much that Dr. Bazin is, through illness, prevented from being here to-day. He was very much interested in the nursing problem. We have had on that subject a very interesting and thoughtful paper by Dr. Cameron, of Peterborough. Dr. McCullough has given us a logical argument for adequate expenditure on public health, and we had a paper from Dr. Lessard on the organization of public health activities in rural districts.

These various subjects are open for discussion and I should be glad if that discussion proceed now. We have a little time before the end of the morning session for any or all of these papers.

Dr. McCullough: I should like to say a word or two just to get this thing started. The thought occurred to me that perhaps some one else would have spoken of it, but I have been struck by the complaisance with which severe outbreaks of disease, such as the one occurring in the city of Montreal, are received by the public. There seems to be very little comment about the fact that there

are at the present time 1,275 cases of typhoid fever—an entirely preventable disease—in the city of Montreal. We have the Parliament of Canada and the Parliaments of the provinces sitting now, and so far I have not seen any reference in Parliament as to why this condition prevails. I have not heard any one in the Parliament of Canada suggesting that this is a matter which might well be investigated by the people entrusted with the duty of the care of the public health. Why is it that this Parliament, sitting here, has not something to say about the outbreak of this epidemic disease in the largest city of Canada? Is it not time that some steps were taken to stop this kind of thing? Every little while we see an outbreak of typhoid, or some other epidemic, in some of our larger cities. It is a scandal that they are not prevented. It seems to me the reasons for this thing should be got at, and the Parliament might very well appoint a commission to go into this matter and discover why the city of Montreal, or any other city, should have an outbreak of the kind in these days.

Reference was made to the education of the public in the home and to the means, such as syndicated articles, for providing this information. Now we have a syndicated article spread all over the newspapers from the Atlantic to the Pacific, written by a certain man who calls himself a doctor. He writes about diet. This man is not a doctor, he is a chiropractor—Frank McCoy. He proposes to instruct the public of this country what they should eat and drink. The question was raised that perhaps the editors of the magazines and newspapers knew what the public want. I doubt very much if they do and if they are able to judge what is useful for the public in this respect. This congress might very well institute some means whereby correct information of the kind should be spread before the public of this country.

The subject of periodic health examination was taken up in a splendid way by Dr. Ramsay. I think this is a public health question of great importance, although, perhaps, not the greatest one with which we have to deal. Unfortunately, we have evolved no proper means of taking it up. If one speaks to an insurance company about having this work done by the man who should do it, that is, the family practitioner, the company immediately says our medical men are not accurate enough and careful enough to do these examinations, that their services in this respect would not be satisfactory. If that is the general attitude the companies take, then it is high time that medical men should remedy this complaint against them and see to it that their members are competent to make these examinations properly so as to satisfy the insurance companies concerned. There is no question in my mind that the man who should do this is the man best acquainted with the family, that is the family doctor, if he will put himself in a position to do it properly.

The question is asked, "Where is the mother who is pregnant for the first time to get her information about the care of herself and her baby?" There is no organized institution in the mother's neighbourhood, except in the larger cities, to afford her this information. The family physician will, of course, give her this information to a certain extent. But it is not organized as it should be. In New Zealand, where they have the lowest infant mortality in the world, work of this kind is thoroughly organized. They have a well constituted health department with hospitals, nurses and full-time officers who furnish this information to the mothers. The results are seen in lowered infant mortality and the higher expectation of life. If we are going to get this work properly done, we must put it on a broader basis and have someone on the job in every locality to do it. That means two things; first, we must have money, then a broader organization. We will not have public health organization on a broader basis in this country, or effective work done, until we have in every locality, as I pointed out before, *full-time health organizations.* These organizations should

be supported in equal proportion by the Federal Government, Provincial Government and the municipality, as in England, where all public health institutions are Government supported to the extent of at least one-half and some of them to the extent of seventy-five per cent.

Dr. J. D. FITZGERALD: I think this conference should consider itself fortunate in having had the privilege of hearing the important papers that have been presented. It was to me a very great pleasure indeed to hear from Dr. Lessard of the development of the county health scheme in the province of Quebec. Dr. McCullough in a very interesting paper at the First Conference on Medical Services in Canada emphasized very strongly the need for the extension to rural communities of full-time health organizations, and it was very gratifying indeed, to-day, to learn that Dr. Lessard had been able to institute two county services in his province and that four more are in prospect. As an essential preliminary to the extension of all-time health services from urban to rural communities, I think that education is extremely important and that the program that Dr. Fleming has proposed, admirable as it is, could very well include emphasis on the desirability of this also. It also affords opportunity for the organized profession, through the Medical Association and the provincial associations, to show leadership in this respect.

This proposal primarily concerns the members of this profession, and I think that here is an opportunity to do something that is worth while undertaking at this time. The point raised in reference to it by Dr. McCullough, I do not think has been sufficiently stressed or has received sufficient consideration, namely the very forward and progressive step taken in the province of Saskatchewan when they introduced maternity benefits. That is a measure which seems to me of the greatest importance to all provinces, and it has been inaugurated in almost all British communities except the Dominion of Canada, and the only exception in this Dominion is the province of Saskatchewan. This aid involves the community in a very small expenditure, and one that is wholly inadequate when one realizes the benefits that accrue to the community from the payment of this particular benefit. It is perhaps part and parcel of a larger thing, to which the Deputy Minister of Health made passing reference yesterday, and one that I think this conference might consider at some future meeting, namely how is the community to afford medical, nursing, and hospital service to those—and they constitute perhaps seventy-five to eighty per cent of the people in a community—whose financial standing is such that they can not afford them; what they should have at that time and, in addition, provision for such things as periodical health examinations. It is frequently reported that those who are very well paid can afford all these benefits, and those who are destitute receive them anyway. No one wants to be destitute in order to get good medical and surgical service.

A great majority of the people are interested in constructive proposals which would lead both in the field of preventive and curative medicine to all people receiving adequate service. The genius of the British people in other parts of the British Empire has led to preliminary steps in the solution of this problem. For my part I do not see why we here in Canada and in the medical profession, particularly in the national organization—the Canadian Medical Association—cannot follow the lead that our colleagues in the British Columbia Medical Association have given us, as they have in a number of fields, such as undertaking a serious study of health insurance. Now no one suggests health insurance as a universal panacea; it is just what its name intends; it is insurance against sickness; and those of us who have any reasonable amount of horse-sense and the means to do it, provide ourselves with health insurance. Now is it desirable to extend that generally in the community to a very much larger number of people, and should it have about it

any element of compulsion? I have my own notions, and you probably have yours, but what I would suggest at this time is that we, as an association, undertake perhaps at some future time, when another conference is being held, to ask certain gentlemen, such as Dr. McDiarmid, the President of the British Columbia Medical Association, to bring this subject forward with certain concrete proposals and suggestions.

In reference to Dr. Stewart Cameron's paper, I feel utterly incompetent to discuss it. I have on two or three occasions enjoyed the benefits of being a hospital patient and shall always feel grateful indeed for the personal service I have received at the hands of the trained nurses.

As to the question of periodic physical examinations of those who are apparently well, I very much enjoyed Dr. Ramsay's paper I happened to be a member of the committee of this association on periodic health examinations. I am sorry that Dr. Martin, the chairman of the committee, is not here to-day to tell you what is being done. Dr. Fleming, who is doing most of the work for the community, was much too modest to tell you what has been done by him on behalf of all the rest of us. We hope to have before the annual meeting in June a form to submit to council for the instruction of the association, and an outline which would be suitable for distribution to the members of the profession. I think we all subscribe absolutely to the view that periodic health examinations should be conducted by the family practitioner. We are interested in my own university to-day in seeing that our future graduates not only understand the philosophy of periodic health examinations, but have had them themselves for a period of years and understand how to undertake such examinations. Finally, I sincerely hope that the proposals made by Dr. Fleming will lead to the establishment of a bureau of the Canadian Medical Association where popular health education may be carried out. I believe it is wholly a question of our having adequate funds, because it has been already agreed by the executive that this is a wholly praiseworthy undertaking and that as soon as we can afford it, we will get on to it.

The CHAIRMAN: I am sure we would all like very much to have Miss Shaw, President of the Canadian Nurses' Association of Montreal, speak to us for a few minutes.

Miss F. M. SHAW (Canadian Nurses' Association, Montreal): First of all, as President of the Canadian Nurses' Association, may I thank you, Mr. Chairman and gentlemen of the Medical Council, for the courtesy of your invitation to Miss Gunn and to myself to be present to hear Dr. Cameron's paper and to have the privilege of discussing it for a few minutes. There are one or two things I should like to call attention to. First, with reference to the point Dr. Cameron made that there had been no official recognition of the Provincial Medical Association by the Provincial Canadian Nurses' Association in any way. That is not a full statement of the case, as regards five of the provinces, because in Prince Edward Island, Nova Scotia, British Columbia and New Brunswick two members of the Board of Examiners are members of the Provincial College of Physicians and Surgeons, thus making with four nurses a Board of Examiners of six. In the province of Saskatchewan, the council managing the examination of the Registered Nurses' Association of the province is made up of five nurses and two members of the Provincial College of Physicians and Surgeons. Then in Ontario, the Committee on Education, nominated by the Government, has representation from the College of Physicians and Surgeons and the Ontario Medical Society. Also in the province of Alberta there was appointed last year an Inter-relations Committee, so that Quebec and Manitoba are the only two provinces to-day where there has not been at least some slight effort made toward the mutual consideration of our nursing problems.

With regard to what Dr. Cameron said about small schools, I may say that in three provinces, Prince Edward Island, Nova Scotia and Quebec, nurses can only be registered from schools having attached to them hospitals having at least fifty beds. It was a joy to me to hear that part of Dr. Cameron's paper. Indeed, I should like to say to Dr. Cameron that if all medical men had the knowledge of nursing problems and the sympathy which is shown in his paper, we should not have any of the problems that exist with regard to our relationship. The problems would be only those which I know we are doing our very best to study, and many of which Dr. Cameron has mentioned. The problem of the subsidiary worker, or trained attendant, whatever you may wish, to call her; the economic problem; the problem of that graduate from the small school who has had such inadequate experience and very often inadequate teaching; the problem of the preparation of the nurses to meet the increasing demands of modern science in surgery and medicine, and in preventive medicine, and the changing conditions of modern life.

Take the economic problem, that affects us perhaps more than some people realize, because to it is generally due that pressure of work under which the great majority of our nurses are being trained to-day in those hospitals where there is adequate opportunity in the way of material and clinical experience. The result may be disastrous, because the nurse goes on sometimes during her three years, having that picture of " getting the work done " held up constantly before her, learning habits of superficial work, from working under pressure, perhaps losing her sympathy for the patient, doing work and not having an opportunity to judge of the result, and not developing that observation of symptoms which is so necessary afterwards; not having the opportunity to think and consider and learn and treat her patients as separate individuals, but rather doing certain definite things for a number of people. So when she goes out, she is not trained for private duty, for the individual care of patients, in many cases, as you and as we would like to see her.

All these problems I think afford a subject for study, which needs to be a very careful study, a study not made on a basis of mutual conferences, however frequently held, alone, but a study made of the facts and conditions. What is a nurse expected to do? What does the public demand of her? What does the medical profession demand? This would take time. However, I think that the holding of such a conference as Dr. Cameron proposes between the medical profession, the hospital association people, and the Canadian Nurses' Association, is most desirable. I am sure the Canadian Nurses' Association, if I may speak for the executive, would be only too happy to agree to any such an arrangement. But I think such a conference could only discuss the subject and appoint members to act on a permanent committee who would meet to arrange for a full-time expert to make a study of the facts, which would be submitted to the committee from time to time for consideration; a study somewhat along the lines of that which is now being carried on in the United States and which is to cover a period of five years. I do not mean necessarily to follow it, but to adapt the idea to our own conditions. I do think that this would lead to a solution of some of our difficulties, and I am quite certain it would solve most of the problems that have occurred as the result of mutual misunderstanding between the members of the medical profession and ourselves in one or two places, which misunderstandings we very much deplore.

The CHAIRMAN: We would now like to hear from Miss Gunn.

Miss JEAN GUNN (Canadian Nurses' Association, Toronto): I consider it a very great privilege to be present at this conference and to say a few words following Dr. Cameron's paper. I want, first, to thank Dr. Cameron for his

very kind presentation of our problems. There are a few points in his paper that I would like to stress because they form very largely the basis of a great many of our difficulties.

In the review of the Rockefeller Foundation for the year 1925, they state there that a nurse is a very important person in the national life. She is important in the hospital, in the public health field, in private duty, in training those who are to follow her, and so forth. This review goes on to say that there has been recently a great deal of discussion about the nurse's qualifications and training, the service she renders—whether she is satisfactory or unsatisfactory, her salary, length of service, hours of duty, her attitude toward her work, and the motive she has in view, etc. You can see in all of these subjects there are a great many points under which the nurse, her training and work can be discussed. The review goes on to say that the nurse of the present time is a storm centre. I do not know whether we are more of a storm centre to-day than in the past. All through the history of nursing, the nurse has been more or less of a storm centre, due largely to the method in which nursing has developed. Dr. Cameron outlined that very well in his paper. The nurse has come into existence under pressure of a demand for different types of service. There has, however, been very little comprehensive study as to how she can best be prepared for that service, etc., and obligation after obligation has been put upon the nurse for which she has not been prepared. We have now come to a very acute realization of the fact that the nurse is not prepared for everything she is required to do. The contribution which this generation of nurses should make to nursing is to endeavour to solve the problem of how best the nurse can be trained for all these different branches of work.

One point which has been misunderstood, I think, and criticized without a great deal of knowledge of the whys and wherefores, is the Nurses' Training Schools. I do not think that any nurse who is thinking of nurses' education in Canada to-day feels that we have yet solved the problem of the curriculum—we are a long way from it. There are certain things we have to remember in planning a curriculum. First of all we have to remember that we have to prepare the nurse in some degree for what she is expected to undertake. We have to also keep in our minds the fact that she is to receive a training by which she will be able to have proper professional status after she graduates. We also have to bear in mind the fact that we have to make that training of the nurse attractive in order to attract students to our training schools.

With regard to the first point—that of preparing the nurse for the work she undertakes, up to the present time, the hospitals in our country have only prepared the nurse for private duty nursing. They have paid no attention to the other fields of work she is required to enter. All the stress has been put on bedside nursing. Nurses started out that way a few years ago. The demands of the nurse were very different from what they are to-day, and the hospitals have changed their idea as to what the fundamental essentials of nursing should be. At the present time, the hospitals require a nurse, in order to be trained in bedside nursing, to serve a length of time which is equivalent to a five-year university course. During that time she receives no special training of any kind. In some of our schools we have introduced public health education. We only try, where we have introduced public health in the curriculum, to create in the nurse a health conscience, and make her in some way capable of passing that on to her patients. We try to make her understand what we mean by preventive medicine. In the future we have to think of different problems in connection with this curriculum, where one will perhaps stress some special training for the nurse, because we are living in an age of specialization, and possibly change to a shorter training course.

The second point—that of the need for proper professional status—is a very important one from the nurse's standpoint. I do not expect it is particu-

larly important from the standpoint of the hospitals, but it is important from the standpoint of the nurse. She should be, after three years' training, equipped to nurse wherever she wishes to locate, and unless her hospital training reaches certain standards, she is not allowed to take that professional status.

The majority of the provinces and states, also Great Britain, will register a nurse, if she is registered by examination in the province in which she trains, not under a waiver or under methods which have been created. That is true in practically all states except the state of New York. There has been quite a little misunderstanding, I think, on the part of some of the medical profession as to why our Canadian schools should register in the state of New York. The state of New York has, perhaps, the highest standard of nursing education in the United States. They do not register any nurse in that state unless she has graduated from a school which meets the requirements of that state, and which is registered as an approved school. After meeting the above requirements she must pass the required examination. To be able to write on the examination she must be a graduate of a school registered in the state of New York. They have, approximately, one hundred and twenty-five schools registered in the state of New York from other states, and, I think, twelve schools registered from Canada. Those schools have registered there to enable their graduates to have the standing which is required in the state of New York, if the nurse is going to work in that state.

The third point, namely, that of attracting students to our training schools, is a very important one. I think we need to bear in mind that entering the nursing profession is a voluntary step on the part of any young woman; you cannot get her into the profession unless she wants to go. The young women of to-day are quite different from the young women entering our training schools fifteen years ago. There are more opportunities for young women outside of hospital work to-day than there were fifteen years ago. In those days a student entered a school because she wanted to become a nurse. She took it for granted that one school was as good as another. But to-day, when a young woman intends to enter a school for nurses, she asks what she is going to get, what teaching she will receive, and what her position will be after she graduates. Hospitals that are looking for student nurses have to be in a position to answer those questions, and it will be necessary in the near future, if a great many of our hospitals wish to continue to train nurses, for the boards of those hospitals to do some straight thinking if they are going to be in a position to attract student nurses and continue a training school.

Dr. Cameron's suggestion concerning trained instructresses is one of the particular problems which we are facing to-day in our Canadian schools. They have solved that problem in the United States to a greater extent than we have. We have one school for graduate nurses in McGill University and a few other Canadian universities have established courses of different types. Steps are being taken in some provinces, particularly in Ontario, at the present time to try to interest the Government in establishing some such course. A recent survey of the Ontario schools shows a great interest on the part of the hospitals in having this type of service for their schools, and after a great many years of hard work and earnest effort I think we are almost on the verge now of having courses established by which the nurses can receive the proper training to become instructresses. The old idea that boards of trustees had, and still have, that any nurse is a teacher has not stood the test of practical application, but we find that if we are going to conduct schools in our hospitals we must provide teachers trained to teach, and we need help in getting these qualified teachers in order to bring about a better teaching standard in our schools.

The point that Dr. Cameron made regarding the discontinuing of nursing schools in hospitals of small bed capacity is one that has been discussed a great

deal by nursing associations. It is felt by some that if these hospitals discontinue their schools it would be a hardship on the community, and so on. Personally I think that if we could have a very careful study made by some committee, such as suggested, as to the actual facts of the case, these small hospitals might very readily see that they will be economically better off if they do not attempt to train nurses. Under the majority of the Registration Acts in the different provinces, hospitals of a limited capacity are obliged to send their students to other hospitals for special branches of work. That is not an exchange of students in very many cases, because the large hospital does not send a nurse in exchange. The hospital receives nothing from that nurse in the way of service, but is responsible for her maintenance to a large extent. All these things should be carefully studied, and I have no doubt would bring about a very marked change in the nursing policy in a great many of the small schools.

Another point that Dr. Cameron touched on, and in which we are all intensely interested, is that of supplying a nursing service to patients unable to pay. That has been discussed at every nurses meeting for the last seven or eight years, and we are not very much further ahead. Some suggestions come for training a second type of nurse. Well, the feeling of the nurses is that a patient who is ill needs the very best nurse he can be given; he cannot afford cheap nursing. So the solution of providing a nurse with less training is not a particularly good one, and those families unable to pay a graduate nurse will probably be unable to pay for that type of nurse—$15 or $18 a week is just as impossible as $35. The problem is a community problem. Criticism has come on the nurses for the lack of nursing care for patients unable to pay. It is not a nurse's problem; it is not a doctor's problem; it is a problem for the community to solve, to see that the citizens are provided with proper nursing service, and that the cost of the nursing service or the patient's ability to pay should not determine the type of nurse provided. The solving of that problem requires the combined efforts of everybody—doctors, nurses, all sorts of organizations, and the community as a whole, and unless it is faced as a community problem I fail to see any solution which can be a permanent one. You can see from the discussion this morning on Dr. Cameron's paper that the nursing profession is in need of assistance, wise counsel, and careful deliberations, in the solving of a great many of our problems. We have to find a way of training the nurse to meet all the different types of service that is demanded of her—that is a large problem in itself. We have to find some way of supplementing hospital service so that the nurses will be released from non-nursing duties.

I think that the committee we hope to see appointed as a result of these different conferences will make a careful study of what nurses are doing in hospitals, and I think it will be found that a great deal of nurse's work in many of our hospitals, large and small, is not nursing. That is another economic side of hospital work—to provide some way of supplementing hospital nursing service. The providing of nursing service to the whole community, the economic side of a nurse's education, that is, who is going to pay for the nurses' education, the proper economic status of the nurse, special training courses for all branches of nursing, and many other problems are urgently in need of satisfactory solution.

I feel I should limit my time or I might go on enumerating our difficulties for another half hour; but the remarks I have made will at least give you some idea how much we would appreciate the help of the Canadian Medical Association, our different hospital organizations, and the public at large, in providing the type of nurse and nurse education we should have in Canada.

The CHAIRMAN: Before adjournment, I think we should ask Miss Smellie, Superintendent of the Victorian Order of Nurses, if she would be kind enough to address the conference for a short time. I may say that we are very much interested in the special organization of nurses which she represents.

Miss ELIZABETH SMELLIE (Victorian Order of Nurses, Ottawa): Officially, I am not here. I am here through the courtesy of the chairman of this group of medical men. While I am not going to enter into the weighty problems which have been discussed, I would like to say, unofficially, that I think any opportunity of our coming closer together as medical men and nurses is to be welcomed. Many of us who were trained in teaching schools learned when we were there that we were considered absolutely essential to the medical profession. It is, therefore, a great shock now and then to meet individual members who do not think we are absolutely necessary even as a complement to their service. My work takes me all over Canada, and I sense this attitude occasionally myself. If the primary function of both groups is to give the best possible care to patients in hospitals and in their homes, any plan presented tending to lead to a better understanding of our problems should be encouraged.

With regard to the statement that we should work out a plan here in Canada, I do think that with the conservatism of the Old Lands behind us, and with our progressive neighbour to the south to stimulate us further, we here, in this country, have the best opportunity in the world for working out an ideal plan. Please let us do it together.

Dr. F. W. ROUTLEY (Toronto): I have been intensely interested in the discussion of these nursing problems. With over five years experience as Field Secretary of the Ontario Hospital Association, and having direction of a fairly large group doing nursing in the outlying parts of that province, I feel in my dual connection with the nursing service that I am in a position to speak of the important factor the highly trained nurse may be in the prosecution of modern health activities. I believe that the successful practice of medicine is perhaps as much dependent on hospitals, at least, upon the highly trained nursing profession, as it is upon the medical profession. If the development of the modern hospital has been brought to a comparative state of perfection, much credit belongs to the highly trained nursing profession.

In connection with training schools, I believe one of the solutions of the modern nursing problem is to be found in cutting all training schools out of the hospitals having less than 100 beds. From an economic standpoint, I am perfectly satisfied there is no reason for a training school in any hospital. I am convinced that no training can be too high or too complete for the modern nurse who has either to attend the actually ill person or whose duties are in connection with the field of public health. Therefore, I am not one who believes in the curtailing of nursing education, for there are problems which the medical profession and the nursing profession together must face. The demand for the trained nurse has been a gradual development. Many of us remember the time when it was a matter of difficulty for the physician and the ordinary home to secure the service of a trained nurse, because of the fact that the home did not want a trained nurse. That condition has passed away; the public has been gradually educated to the necessity of trained nurses in the home. Because the public has been educated to that necessity, there is one class that meets its own demand—those who can afford to pay for a full time nursing service are having it.

It has been said this morning that the poor in the hospitals are properly nursed regardless of their ability to pay, but there is a great class of the community in this and other countries which is demanding a nursing service because they see its value. They have gradually been educated, notwithstanding the inability to pay, to the value of a splendid nursing service. There is only one point I wish to make namely, that all hospitals should be responsible entirely for the nursing service in the institution and pay all the nurses and provide a sufficient nursing service for every patient in every ward. That is one point I wish to make.

In connection with the nurse in the home, Miss Gunn has said that you cannot meet the need for a good nursing service by providing a poor nurse, and I will agree with her to that extent. She says that the question of nursing service is a community question, and I will agree with her to that extent. I will also add that the question of supplying a nursing service to the community in this and every country is a community question, but while it is a community question, or ought to be, it has never evolved itself into a community question, so the medical fraternity has been obliged to supply this service. Now, in the absence of facilities for supplying a full-time nursing service, we should have a supervising graduate nursing service for the private homes of ordinary means. Certainly some sort of service which that trained nurse would supervise would be better than nothing to do the ordinary routine work.

The CHAIRMAN: Before Dr. Graham speaks, I will ask the members of the Resolutions Committee to meet immediately after adjournment this morning.

Dr. DUNCAN GRAHAM (Toronto): The discussion this morning has been intensely interesting. It is quite impossible to refer to all the problems that have been brought up for discussion and I shall confine my remarks to the nursing problem.

It is evident from the comments of those in charge of nursing training, of those that employ nurses in private practice, and of those associated with hospitals where nursing training is carried on that all is not well in the field of nursing. In the consideration of this problem attention must be given to factors contributing towards the present state of unrest. Twenty-five years ago the majority of patients were treated in their homes and the majority of nurses following nursing as a calling after graduation were engaged in private nursing in the home. To-day the majority of people acutely ill or suffering from conditions requiring the facilities of a modern hospital for clinical investigation are treated in the hospital, with the result that the majority of graduate nurses are employed in the hospital instead of the home, many of them confining their work to hospitals. Miss Gunn has pointed out that the activities of the nurse have extended and are extending. This is also true of the activities of graduates in medicine. The advancement of medical knowledge by providing better methods for the diagnosis and treatment of disease, the development of preventive medicine and the growing realization of physicians that it is their duty to prevent disease as well as cure it are factors which have extended the activities of both doctor and nurse. As a result increased educational requirements have become necessary for students of nursing and medicine to equip them for these increased activities.

Formerly, nearly all large hospitals, apart from those looked after by sisterhoods, were supervised by medical men familiar with hospital problems concerning the medical treatment of the sick, nursing and nursing training. With the increasing cost of hospital maintenance contributed to in part by the increased facilities demanded by both doctors and patients for the diagnosis and treatment of disease, Boards of trustees of hospitals have been forced to pay greater attention to costs in hospital administration. As a result the administration side of hospital activities has tended to dominate the professional side. In many instances laymen have been appointed as superintendents instead of medical men. This lack of medical supervision over the activities of the hospital has encouraged attempts to solve nursing problems independent of medical consultation. In my opinion this has not been in the best interest of those concerned.

A problem stressed by nearly every speaker has been the economic one, i.e. the cost of an illness, more particularly for the person of moderate means. As this applies to private nursing attention I believe Dr. Routley's suggestion applicable as he has found it to be to the small hospital is the principle to be adopted in the larger hospital. I am convinced that the employment by the hospital of graduate nurses for the care of private patients is more economical and more satisfactory. For some reason nurses in training have not been satisfactory to the private patient.

Problems in nursing in a large hospital in a city differ from those in a small hospital in a town, in a teaching hospital and a non-teaching hospital, and all require, in certain details at least, a different solution. All those interested should get together and from a combined discussion of the difficulties suggest a solution.

The CHAIRMAN: Before adjourning for lunch I want to acknowledge the great advantage we have enjoyed this morning in having with us representative leaders from the nursing profession. I wish to convey to them in your name our thanks for their presence here, and for the splendid part they have taken in the discussion.

TUESDAY AFTERNOON SITTING

The conference resumed at 2.40 p.m., with Dr. Primrose in the chair.

The CHAIRMAN: I call the conference to order. The first paper is by Dr. Meakins of Montreal on

THE PRODUCT OF THE MEDICAL SCHOOL

Dr. J. C. MEAKINS (Montreal): I wish to preface my remarks this afternoon with a short statement in order that I may not be misunderstood on some of the points which I wish to make. I have reference to the question of practical education in medicine as far as universities are concerned. I have held a rather unique position in my teaching appointments in the last twenty years in that I have gone upstream as far as the introduction into North America of true bedside, or so-called clinical teaching is concerned. I want to make it clear that there is a great opening for practical bedside teaching. I think Dr. Murphy will agree that we were fortunate in our day in having facilities and opportunities in the wards, in the out-patient departments, and in the operating theatres of the hospitals of Montreal, which were unexcelled by any hospital or medical school in North America. So if sometimes I am a little dogmatic in how far we really can teach students the *practice* of medicine in their undergraduate course, I hope you will understand that I am not speaking as one who does not believe it can be done, but that I realize from past experience, both as student and teacher, that it has its limitations.

The product of any creative process rests upon two essentials—one, the quality of the raw material, and two, upon the manner of its manipulation, or its cultivation and training. This is equally demonstrable whether the product be a battleship, a race horse or a flower. Furthermore, these two essentials are modified depending upon the character of the final product desired. Therefore, in dealing with the specific product under consideration it would be well if its characteristics or specifications should be outlined before the methods of manufacture are seriously considered. This, I take it, is the so-called "business man's method" of procedure.

What kind of product do we wish our medical schools to deliver? This will naturally depend upon the important economic law of supply and demand. The population of Canada in the census of 1921 was 8,787,483, of which 4,351,122 were classified as urban and 4,436,361 as rural population.

In this connection it is important to determine what the tendency is in regard to the increase of such a distribution. The statistics since 1891, in decades, give the following information:—

	Rural	Urban	Ratio of Rural to Urban
1891	3,294,141	1,537,098	2.14
1901	3,357,093	2,014,222	1.66
1911	3,933,696	3,272,944	1.20
1921	4,436,731	4,351,122	1.02

It is evident from these figures that the rate of increase of the urban population of this country has been twice as rapid as that of the rural population in the last thirty years. This has occurred in spite of the opening up of new lands and the encouragement offered by the Government for those who ostensibly enter the country as agricultural immigrants. It can further be shown that in recent years this congregation into urban districts has been most conspicuous in four cities, namely: Montreal, Toronto, Winnipeg, and Vancouver.

The ratio of doctors to population has remained practically constant—1 to 968 in 1911 and 1 to 962 in 1921. This constancy has been maintained in spite of the fact that few graduates of schools of other countries come here while from 25 to 30 per cent of the graduates of Canadian medical schools go abroad, particularly to the United States.

Province	1911 Population	Doctors	Ratio
Alberta	374,663	369	1:1015
British Columbia	392,480	416	1: 943
Manitoba	455,614	433	1:1052
New Brunswick	351,889	281	1:1252
Nova Scotia	492,338	408	1:1206
Ontario	2,523,274	3,053	1: 826
Prince Edward Island	93,728	72	1:1301
Quebec	2,002,712	2,000	1:1001
Saskatchewan	492,432	379	1:1299
	7,179,130	7,411	1: 968
	1921		
Alberta	588,454	562	1:1041
British Columbia	524,582	610	1: 860
Manitoba	610,118	524	1:1164
New Brunswick	387,876	271	1:1431
Nova Scotia	523,837	457	1:1102
Ontario	2,933,662	3,839	1: 764
Prince Edward Island	88,615	72	1:1230
Quebec	2,361,199	2,274	1:1038
Saskatchewan	757,510	510	1:1479
	8,775,853	9,121	1: 962

Do these changes of population afford us any criterion as to what the so-called type of our product should be? It has been claimed that the general practitioner is the ideal medical attendant for the rural district. This contention is supported by the argument that in the centres where the population is congregated there are many more facilities for the treatment of patients by hospitals, specialists, special clinics and dispensaries, etc. Under these circumstances, the practitioner is not dependent upon his own individual efforts and resources. Even if this be so, is the raw material to be any different, and is the method of manufacture to be any more or less refined than that used for the production of any other type of medical graduate. I strongly protest that

it should not be the case. The description which one often hears of different medical schools, that this is a clinical school, and that a scientific school, is all wrong and deceiving. The popular conception of a scientist, or a scientific physician or surgeon, as a man who works in a laboratory and who uses instruments of precision is an inaccurate as it is superficial, for a scientist is known, not by his technical processes, but by his intellectual processes; and the essence of the scientific method of thought is that it proceeds in an orderly manner toward the establishment of a truth. Science is a method of thinking, not of doing. Its ultimate object is truth and the whole truth; it is better to acknowledge that one does not know, rather than to accept as completed a half truth or a falsehood, however plausible and satisfying.

I take it then that the ideal product of our medical schools should be a scientific practitioner, no matter what path he follows. In other words, one only satisfied by the whole truth who will pursue this object in patients as individuals and in disease " en masse " until the goal is reached and will not be content until this is attained. Our greatest sins are those of omission and indolent acceptance of unproven results, rather than those of commission. The patients who wander to the various 'opathies and 'isms are those we have been content to label as having " nothing the matter " with them.

With this product before us, how are we to produce it? We must first deal with our raw material. Thomas Brown said in his " Introduction " to the reader of " Pseudodoxia Epidemica ": " Would truth dispense, we could be content with Plato that knowledge were but remembrance, that intellectual acquisition were but essentially reminiscential evocation, and new impressions but the colouring of old stamps which stood pale in the soul before. For what is worse, knowledge is made by oblivion, and to purchase a clear and warrantable body of truth we must forget and part with much we know."

Some years have now passed since each of us obtained his medical degree. We are either satisfied or dissatisfied with our medical education. As many have become teachers and leaders in the chosen branch of our profession, and as we are citizens of one of the most taught peoples of the world, if there were anything wrong with our medical education, it is our duty to ponder upon it seriously and, if possible, find where the fault lies.

When we review the great changes that have come over school education in the past generation, there are a number of points which immediately attract our attention. When we realize the vast expansion of the taught and try to conceive the equally great multiplication of teachers, it is obvious that such an evolution could not take place without considerable intellectual dislocation. In order that it could be attained at all, education had to fall back upon standardization and almost monotonous uniformity. As it was to be a utilitarian weapon it would necessarily have to be essentially practical, and, as a consequence, the mere acquisition of facts became synonymous with learning. This practical aspect of education developed what might be called the encyclopaedic mind. Much of what was considered in years gone by to be the essence of learning was discarded, or relegated to the background as of secondary importance. The teaching of classics was considered unimportant. Many more important utilitarian matters were introduced into the child's and adolescent's education, neglecting the important principle that is of first importance in all systems of true education, namely mental and intellectual discipline.

There was necessarily a change in the numbers and also the type of teachers, and they were turned out by mass production. They were instructors essentially and not cultivators of the mind and mental faculties. As time passed, the personal contact between master and pupil disappeared. The essence of the English public schools and the influence of the Scottish village dominee—the second, alas, fast disappearing—are examples of where the personal contact in

class-room and on playing-field led to sympathetic understanding between the old and the young. The understanding of human nature afforded a strong influence on mental and moral development, while the exhortation to play the game in all situations would tend to disappear as this personal contact became more remote. The joy of the master in cultivating the mind of the brilliant youth, the instillation of the love of learning rather than the storage of facts, is only possible when personal contact is maintained.

I strongly believe it is only the exceptional woman of any age who can teach a boy between the ages of 14 to 20, and it is not right to expect a woman of 20 to 30 to succeed. All biological experience is against it. This is the crucial period in the production of our raw material. I, therefore, make a plea, and a strong plea, for the small college and academy which have performed such an outstanding service in the educational system of Nova Scotia. We may lay down all the rules and regulations we have a mind to, we may place on paper the number of hours and the quantity of the work to be covered, but we cannot determine how these regulations are to be carried out. This, alas, it is very difficult to do by examination; it can only be determined by the contact of mind with mind.

We now come to the manipulation of this raw material; given the ideal student, how are we as teachers to continue its cultivation to perfection?

We must recognize two types of teaching, or of education; first, the practical, utilitarian, the storage of ordinary knowledge, making the mind a mere warehouse of disconnected articles; and second, the cultivation of the mind to make it an ever-increasing force, to develop it with the power of reasoning and the worship of reason. We in our medical schools and universities must seriously ask ourselves: Does our type of teaching continue to allow for freedom of thought and mental exploration and development? We must face the question: Are our medical schools and colleges seats of learning, or are they merely trade schools tacked on to the end of secondary education? In fact, what are they, and what are their ideals for the future generations?

The mere collection of facts is not education. As John Stuart Mill said: " The proper business of a university is not to tell us with authority what we ought to believe and make us accept the belief as duty, but to give us information and training and help us to form our own beliefs in a manner worthy of intelligent beings; to seek for truth on all and demand to know all the difficulties in order that we may be better qualified to find and recognize the most satisfactory mode of solving them."

Contrary to this, the cry has been to make the study of medicine more practical—to teach the students the practice of medicine and surgery. It is not the duty of a university or college to train students to practice, but to train the mind to learning and how to use the technique of the art and science. By making teaching essentially practical, directly applicable to practice, there develops a habit of mind which is not to reason, not to understand, but to mentally swallow facts, practical facts, facts which be of a monetary value. They fail to realize that facts of themselves are of little value and at the most are but the servant, or tool, of reason. William von Humboldt has expressed this in another manner: " Everything in the internal organism of higher institutions of learning depends upon preservation of the principle that no science or truth is ever completely discovered or may ever be entirely known, but that it must be constantly sought for and rediscovered. As soon as one ceases to investigate, or imagines that knowledge need no longer be created by profound effort of the mind but by a simple external addition or collection of known parts, everything is irrevocably lost forever—lost for science itself, which only remains an empty shell, and lost for State and community. For only that science which is the product of the innermost mind and may be similarly transplanted into another, builds and forms character; and the State is not concerned with empty knowledge and subject, but with character and action."

Here, I believe, is the essential defect which we must guard against. The student who leaves his Alma Mater with his mind stored with facts, but without the power of reasoning and application, is lost. He attempts to practise and finds that he cannot use his facts. Many there are who succeed in making money, but there is resentment against the mental drabness which surrounds him. He soon concludes that he must relearn everything. It is not a question of relearning medical facts but of finding, by bitter experience, how to use them, and it means an entire mental revolution. He is resentful of a past which makes this necessary. So he takes a refresher course, and here he finds many of his cherished facts exploded. Still he begins unconsciously to acquire more facts, practical facts—so-called tips—a racing expression always of doubtful value, failing to realize that it is the capacity of how to use his knowledge that he needs.

To my mind, what is apt to go fundamentally wrong with medical education is not what is taught, but how it is taught; in other words, do we implant the proper ideal of learning in the student's mind. It is true that the medical schools must, more or less, conform to rules and regulations made by outside bodies, but this must be accepted until it can be remedied, and before this can be brought about the medical schools must demonstrate that they are capable of inculcating and continuing to inculcate the proper type of learning.

The controversy between didactic and bedside teaching has from time to time been a vehement one. The mere reading of a text-book before students is not teaching and is a legacy from the days when printing was expensive and books were few. The professor had a professional reader to read to the class. On the other hand, lectures should occupy an important place in all universities, provided they are spontaneous and original expositions of the subject which cannot be found elsewhere. Some of the greatest teachers of medicine the world has known have been so, on account of the faculty they had of inspiring the student with thought. We deceive ourselves that bedside, or so-called clinical teaching does away with the danger of didactics. This is far from the case. A student may learn the symptoms of the disease at the bedside, like a parrot, merely committing the facts to memory. If he does not understand and is not able to reason from what he observes, his observations are useless. Likewise, the passion for correlation may be overdone. An association of ideas is good, but such association which merely develops into memorizing gymnastics is worse than useless.

The student should be taught to think for himself. He should not accept any statement which to his mind does not seem reasonable; he should be encouraged to argue; he should be encouraged to debate—this not only with his peers, but also with his masters. He should have the opportunity of going to his masters for mental enlightenment and encouragement, looking upon them as his guides, counsellors and friends. He should have an opportunity to make an intellectual confession and ask for guidance.

Equally in the lecture room, the laboratory, or at the bedside, it is possible to instil that love of inquiry, that desire to fathom the reason for disturbed anatomy and function, which is medicine. We should attempt to do away with the blind acceptance of opinion. The attitude of master and student where the latter must accept and swallow, even though it chokes him, what the former states, should be discouraged.

So far I have dealt with the mental training of the student and what mental attributes I would expect him to possess. But we have still another duty to perform. That is to teach him by direct example and practice the use and limitations of his technique. It is not enough that he should know how it is done, but it is essential that he should have reasonable practise in its application. It is at this stage that we are most held up to criticism. Particularly is this the case in the manipulation or mechanical branches of therapeutics, such

as surgery in all its specialized forms, massage and physiotherapy, X-ray and radium treatment, etc. It is extremely difficult for medical schools to accomplish such perfection as is sometimes demanded of us. It is all very well to suggest that students help at operations, act as second and third assistants. (they do that at all the medical schools of the first class order.) But this is apt to be a two-edged sword. He cannot become familiar so with the feel, the touch, the immediate decisions which are required. It gives him a false sense of the ease of these procedures. It is true that there are many phases of these therapeutic measures which can be perfected; the setting of fractures, the surgical treatment of superficial injuries, etc., but I hold it is not to be expected of the undergraduate medical schools to educate its students completely in what should be post-graduate studies.

In the use of facilities for practical instruction we must always remember that we, as teachers in general hospitals, occupy a dual position—that of teacher and that of healer. Furthermore, all students are not alike—they have not the same ideals, the same inclinations, the same capacity. Here is brought to the fore an important consideration in medical education. No matter how we may lay down curricula, no matter how we may chop and change, prolong and shorten, we are faced by the undoubted fact that all students are not the same. Therefore, we must allow our product in his evolution a certain latitude of time in order that he, within reason, may develop his mind and talents as his urge of intellectual acquisition may dictate. I do not hold for early specialism but for reasonable freedom of thought and action.

The matter of ethics in the profession is one of instinct and conscience. Our product should be a gentleman in the highest sense of the word. He begins this at his mother's knee, and in his home, continues it on the playing fields and in the social life of his boyhood and manhood. We, his teachers, should by example inculcate the desire to be true, kind and faithful to our profession. His colleagues must see to it that this continues in his after life—public opinion is the most powerful disciplinarian force that exists in the world to-day.

So our product should leave us, realizing he is but entered on a pursuit of knowledge which will never be completed, and that his cultivation has been honest and sincere; with a full appreciation of the difficulties and high ideals of his profession, and approach the future in quest of truth, with an understanding of the fallacies and errors of the past. So I close, gentlemen, with the words of Thomas Brown, "Lastly, we are not magisterial in our opinions nor have we dictator-like obtruded our conceptions, but in humility of enquiries or disquisitions have only proposed them unto more ocular discerners. And, therefore, opinions are free, and open it is to any to think or declare the contrary."

The CHAIRMAN: With your consent, gentlemen, I shall make a little change in the program and ask Dr. Tory, President of the Unversity of Alberta, to read his paper at this point on

THE ORGANIZATION OF A NEW MEDICAL SCHOOL

Dr. H. M. TORY (Edmonton): I feel that I should begin by apologizing for having the courage to come before you this afternoon. It was only at the urgent request of one of your committee that I consented to be here. After giving my consent, I began to ask myself just what it was that you would like me to speak about, and, finally, decided that I could not do better than, avoiding all technical phrasing and expressions of technical opinion, just tell you a little about the process by which we brought our medical school in Alberta to the position in which it is to-day; that this afternoon session being given over to a consideration of medical education, you would, perhaps, be interested in getting a layman's point of view.

When I went to the province of Alberta some years ago for the purpose of organizing the University of Alberta, I frankly confess to you that I did not for one moment suppose that during my lifetime there would be a medical school organized out there. I assumed that the problems of general education would be so absorbing that we would not be called upon to enter specially technical fields except, perhaps, in the direction of agriculture and applied science.

When we began the work of the University of Alberta we adopted a few simple rules for our guidance, which, I think, were of help to us. One was that we would not undertake to do any work in the University of Alberta that we could not do as well as it was being done elsewhere. I set my face like flint against making the university in any of its branches anything corresponding to a glorified high school. We, therefore, in the beginning, lost a great many students to older institutions. When they would come to me and say, "We want a course in so and so." we would say to them, "Frankly, we are not prepared to teach that course. If you want it, you must go elsewhere."

Another rule that helped me greatly was the resolve not to bring into the University of Alberta men whose experience was limited to one institution of learning. The result is that we have on our staff representatives of, I think, about fifty educational institutions; many of them having their first courses in one university, but all of them having gone somewhere else for further study. This eliminated from the competition for university positions in all our branches the men who might be regarded as super-high-school men who so often seek university appointments. It opened the door to another class of men altogether, and once that idea was established we never afterwards had any difficulty with respect to it.

The third idea we had in mind was that if we were to hold good men on our staff they must be given facilities for their work. In other words, while it might have been all right fifty years ago for men to work in makeshift laboratories that were not laboratories at all, it was no reason in this modern age for us to ask men who had been highly trained, to operate under conditions that made it impossible for them to do their best work. The result was that we set ourselves to provide proper buildings and equipment, then when a man was invited to come to the University of Alberta to teach in any department, if laboratory accommodation and equipment was not already available for him, provision was made beforehand for that laboratory accommodation and equipment to be secured on his arrival.

I mention these things because I think it will give you some little clue to the causes which helped us forward with our medical school. Now the causes which led to the organization of the medical school were three-fold.

First, I found myself in a community with a few central towns and with a very large rural population. There were great numbers of medical men in cities; the country districts were without medical men at all. I had not been long in Alberta when the legislature began to ask, "What are you doing to help the country in the way of preparing men for training for medicine?" And this argument was put up to men continually: "The men who come in to us from eastern hospitals come from older settlements and they find life too difficult and hard in the new settlements of a new country and, therefore, in spite of all you can do, they stay in the towns and cities. You must do something for the country districts." The result was we were having a constant stream of men, men who had failed in examinations elsewhere, making application to the legislature for licenses to practise on condition that they would practise in the country districts. You can understand how my whole soul revolted at that. It was clear that until we could make some provision ourselves for the training of men from the country, we were almost certain to have a continuation of that process of making doctors.

I think you will be interested if I give you one illustration. A gentleman came to my office one day and presented his credentials to get examined as a medical man. I refused him the examination. He then went to the Legislature

and presented his credentials, and succeeded in getting a local lawyer to back up his application to be made a doctor by statute. It was clear that we had a perfectly good case. It cost us about $500 but we sent that fellow about his business. We proved that he had bought his credentials from a medical school in the United States, from a school whose dean had spent a term in jail for selling certificates. That was the last time that a member of the Legislature sought to give a man the right to practise by statute.

Then pressure was brought to bear upon us to begin teaching. I came to the conclusion the time had come when we must make a beginning, but that our work must be done properly. We began our medical school just as we had begun the university itself. We began with just enough space to accommodate a freshman class, laboratory, etc., and with a small body of men. We decided we would begin to teach the first year the preliminary subjects of medicine. We made the standard of matriculation the standard required in the great universities of the east, and no matter what pressure was brought to bear upon us, we never swerved from that standard. The result was that when our students began to move out to older universities, we were pleased to find that recommendations came back from the various universities that the men were as well educated as theirs.

We had our physics and chemistry departments well organized, with good laboratories and good equipment. These we made foundation subjects. We then introduced biology, zoology and botany, putting these subjects under the direction of full-time instructors. We made all our courses to cover the whole year; in other words, we had no patchwork courses. I am firmly convinced, and I have expressed it very often in various discussions, that to give a man in any subject a mere smattering of knowledge is not sufficient, but will rather tend to destroy that kind of mentality which Dr. Meakins was telling us about this afternoon. From the very beginning I was convinced that to take such a subject as biology (including zoology and botany) and to give a three months' course in it was not sufficient to create a scientific feeling for the subject, but would probably result in the mental deterioration of the student, unless he was cured later by having these sciences taught him in a solid way. I was and am still convinced that the greatest impetus to the student to really secure a mastery of a subject is given when a subject is taught substantially by men who are masters of what they are teaching. I have watched with a great deal of interest the effect of different classes of teachers in my own university, and in our medical school as well, upon our student body, and have seen the quickening influence upon student life of a man who is doing something new and special in a subject in which a student may be entering often for the first time. We determined to make sure that before a student finished with the fundamental sciences and entered upon the clinical part of his work, he would have such intensive study as would lead him to see the significance of the sciences, to understand what is the object of scientific instruction and to give him confidence that a way can be found to the solution of the problems to-day just as has been the case in every other age of the world.

Having established our elementary courses, we came to the time when we had to establish public health laboratories in the province. These public health laboratories opened the door to the establishment of certain new courses in the university; so when we put up our medical building we made provision for as completely equipped public health laboratory as it was possible for us to have. We began by selecting the men to take charge of these laboratories—not merely routine laboratory men as is so often the case, but men who are authorities on the subjects themselves, and letting them select the routine men to work under

them. The result was that a public health laboratory opened the door to the teaching of bacteriology, hygiene and pathology in such a way that we were able to put these on a firm basis without any real extra cost to the province, except some additional salary, because of the quality of the men we employed. We thus had the full influence of these men in connection with the organization of the higher teaching work.

Then there came a time in the history of our province when the question of whether we should go farther forward was raised. It reached an acute stage in 1918 when the terrible influenza epidemic swept over the province. I was in England at the time. The Legislature became alarmed at the number of deaths that occurred in the country districts without medical attendants and they turned to us and said, "You must make provision for carrying these men forward in their courses." For it had happened that a certain percentage of the men who had gone through the elementary courses in our university had gone to the eastern universities and had not come back to us. With our own men thus going away, and staying away, provision had to be made to fill in the gaps in our own life by training our own men and keeping them at home. Naturally in a new country the temptation to well-trained medical men to go into the country districts is not great, unless the men have lived in that atmosphere themselves and, therefore, being familiar with it, do not feel the hardships as much as newer people coming in would find them.

When that pressure was brought to bear upon us, I recognized this fact, that the time would come when we would be criticized for the money we were spending, so I set myself the task of getting behind the work of the university a substantial endowment, if that were possible. It just happened that the time synchronized with the effort which the Rockefeller Foundation was making to assist the universities of America, and pressing our case, I told them the story. We were able to get substantial help from that Foundation, which, with the corresponding help given us by the Government, enabled us to add the clinical years.

Now the question of hospital facilities always presents a problem. The difficulties in the way of clinical material, hospitalization, etc., made our board exceedingly reluctant to go beyond the fourth year of a medical course. We had, however, a fortunate set of circumstances in our early history that led to the establishment of a hospital on university grounds. When the hospital was put there, I had entered into an agreement with the city that under certain circumstances that hospital might be taken over by the university so far as internal control was concerned. In other words, twenty years before, almost without realizing what I was doing, I had made provision for a hospital on the university ground, where instruction could be given by men appointed by the university. When the time came for giving instruction I was able to persuade the Government that the thing for us to do was to buy the city's right in the hospital. They consented to provide the funds to purchase the hospital from the city and hand it over to the complete control of the university. After three years, the Government has come to the conclusion that it is its duty to support the university hospital, and for the first time this year we have been given a substantial vote to wipe off the annual deficit. After securing this hospital, we also secured the right to teach in two other hospitals owned by the sisters of the Roman Catholic Church and situated in the city of Edmonton. We felt we were in a position to launch our medical school upon its full career. At each step we had in mind the necessity of doing our work well, the best that could be done under the circumstances.

Naturally, Mr. President, it has not been quite as easy to accomplish all this as it is for me to talk about it to-day. We have had times of very grave anxiety, because I was always determined not to do cheap work. But, bit by bit, we have built firmly until to-day we have a medical school graduating about fifteen men a year, men, I think, worthy of the great medical profession. Two or three years ago, the Carnegie Foundation came and looked into what we had done and gave us Class A standard. Personally, I regard this classification of importance only in so far as it indicates that our school is substantially organized and our work being well done.

We look for sympathy and help from the older universities, and I am glad to say that we always received it. Often in those early days I conferred with the authorities at McGill and Toronto Universities. Once or twice the medical faculties of those two great institutions held joint meetings and honoured me with an invitation to sit in with them and listen to their conferences. It was this sympathy, help, and co-operation of the older universities and our knowledge of their confidence that encouraged us to complete our task.

I would like to say in conclusion that I am perfectly certain there is no other profession in the world to-day that demands the quality of men that is demanded of the medical profession. I have said a score of times, and I say it now openly, that I regard medicine as the greatest profession in the world. It is a profession that calls for really able men. I have studied closely the question of how we can improve the quality of the men that we let enter the medical profession. There are so many factors which enter into this subject that it is exceedingly difficult; but the medical faculty of Alberta to the best of its ability is trying to set high intellectual standards and make men live up to them. We give no encouragement to the man who is not capable of mastering the material that he ought to know in order to be a medical practitioner; I think we have that absolutely clear in our minds. I happened to be speaking recently along this line at a meeting of medical men in the United States, and when I was through a distinguished medical teacher made this statement: "I am not at all sure that Dr. Tory is quite right regarding this question of standards or that his case has been proved." He then gave an illustration of a man he had in his medical faculty who could not pass his final examinations, "But," he continued, "he is a good man, fine at the bedside; he ministers to the sick," and after hesitating a little added, "That man is now practising medicine in our state with my permission." I was a guest on the occasion, otherwise I could not have kept my seat. I was on the point of replying, "Mr. Chairman, this gentleman's statement explains the existence of all the medical quackery on the North American continent to-day;" but I refrained. Then a distinguished university president, himself a medical man, rose and replied "There is just one remark I want to make: The man to whom you refer should have been a minister, not a doctor." That statement completely expressed my feeling. Whatever mistakes we may make with regard to the moral quality of the men entering upon the study of medicine we can avoid intellectual errors if we fix high standards and stand by them firmly.

Gentlemen, I hope that what I have said has been of interest to you.

The CHAIRMAN: We have heard not only one of the most interesting of the communications that have been presented to this conference, but I judge one of the most important we may expect to receive. Dr. Tory has told us he is a layman, and therefore he has not the prejudiced opinions of the medical man and he was capable of viewing the situation from a standpoint which is, as far as I know, unique in the establishment of medical schools. Those of us who have taken great interest in the progress of medical education can realize the magnitude of the problem which Dr. Tory attacked, and I feel that we should congratulate him on the success of his adventure. I for one would like to express an individual opinion as to the soundness of the principles which

have guided Dr. Tory in the establishment of his school. The teaching of the sciences for example includes a thorough and adequate training in the sciences. Then he made an observation of importance in connection with his project, regarding the necessity for adequate clinical facilities. This is supplied in the University of Alberta by a hospital of 100 beds and whatever assistance may be obtained from two other hospitals taking clinical instruction in his school. I am quite sure that some of those present would like to discuss this paper and that of Dr. Meakins. These two papers are now open for discussion.

Dr. MacCallum: I see before me a group of fifty or sixty physicians. I am the son of a minister. I desire to say that I see before me fifty or sixty ministers, and I am sorry if there is any man in this group that has not some time or another recognized that he ministers to souls as well as to bodies. You cannot minister to bodies without ministering to souls, and I am quite sure that Dr. Tory when he said that, did not realize what each and every one of you know, that you have got to minister to the body and very frequently to the soul. I have had patient after patient who has come to me—they call me the Father Confessor. It is not that I prescribe anything for them or really do anything to aid them, but they simply confess what are really their spiritual and mental worries, and immediately their bodily worries disappear. I could tell you some very amusing things about them.

Now that brings me to Dr. Tory. Perhaps he will tell me who it was that said, "The highest study of man is man." The difficulty is that we as medical teachers too frequently think simply of the physiological factors, that is, of the lower functions of our structure. There are also higher functions and if you are going to be a true physician you must minister to those higher functions also.

I was pleased to hear Dr. Meakins speak about the product of the medical schools. I am glad that he did not say, the finished product. There isn't any finished product in medicine. You and I know as practitioners that we go on and on, and that the medical school continues to function in us. The only difficulty is that we are dead before our education is finished.

Now then, from the standpoint of the public; what does the public demand of a medical school? It demands that it turn out a skilled product; at least, what it regards as a skilled product. That brings us at once to the question, what is skill? The definition that has always appealed to me is that skill is a superstructure of applied education upon a basis of common sense. The successful physician must have that—a superstructure of applied knowledge on a basis of common sense. The education of a medical student is really rather peculiar. Fundamentally we have to get at the point of what education is. I myself define education as the capacity to think. I confess that one of the best educated men that I ever met was a man who could not read or write, and he happened to be an Indian chief. But he could *think*, and we have all got to learn to think. But that is not a sufficient definition of education. We as the teachers of medical men, striving to give them an education, must not forget that we have to give them something more than the mere superstructure of applied education. Education is not something to make a living by; that is where many institutions go wrong in their conception. The popular idea of education is that it is something to make a living by. It is not. It is something to live *with*, and you have to give your medical students something more than merely applied knowledge; you have to give them something that will carry them along in time of stress and trouble.

You know that a medical man is probably the most solitary man on the face of the earth, and he has only the superstructure of applied knowledge to help him. If I had nothing else but that I would have suicided long ago.

The Chairman: Is there any further discussion?

Dr. George A. Ramsay (London, Ont.): I desire to ask a question: As to the product of the medical school, would advantage accrue by the establishment of an interchange of professors between the various universities, the principle to be applied to certain subjects of the curriculum and also presiding examiners? The objective of this conference, as I interpret it, is to weld Canadian medicine into a nationalized character. That project would, it seems to me, be advanced if an interchange of ideas could occur between the East and the West. That seems to be one of the national difficulties applied politically, and it probably has the same force applied medically. The precedent for this is already well established in the advantages that have accrued from the interchange of college ideals. To students enjoying the Rhodes scholarships; the benefits that have accrued to the respective educational departments by the interchange of Dominion teachers with those of the British Empire and its component parts; and in medical education the pleasant experience that has come from the interchange of speakers under the plan of the Canadian Medical Association; and, finally, the intercollegiate exchange that existed between Toronto University and Harvard University last year. The extension of this principle to undergraduate teaching might, perhaps, have its advantages.

The Chairman: Is there any further discussion?

Dr. J. C. Simpson (Montreal): In the two papers which have been presented this afternoon, and the discussion yesterday afternoon, one point was emphasized and has remained with me, because, I think, that it is really fundamental. Dr. Meakins, in referring to the product of the medical school, spoke of the raw material. Dr. Tory also spoke of the character and type of the men who are going into medicine. Yesterday we heard of the difficulties in the matter of medical ethics and were told that the ethical questions which trouble the medical profession are matters that really concern a man's character. One might go on to enumerate several references in the various papers, having regard to the raw material.

Now, it seems to me that one of the most important things in medical education is choosing the men whom we are going to educate. Of course you will reply that we are doing that, that our licensing bodies are setting standards of preliminary education; but that does not quite meet the situation. If we were going to establish an orchard, and look for good fruit, we would not be content simply to get stock that has been well nurtured, but we would want stock of good heredity. In choosing matriculants for entrance to our medical schools, we have, perhaps, not been laying enough stress on the choosing of the individual; we have been dealing with the mass rather than with the individual. We seem to be very much more concerned as to whether the individual has fulfilled all the educational requirements, than with the type of man he is. In our own school, and I am sure conditions are similar in all our Canadian schools, we are now getting many more applicants than we have places available. It comes then to a matter of selection from these applicants. In the larger schools we select one man out of four or five. We can fill our schools many times with men who meet the minimum requirements of our Board, but it is difficult to fill our schools with men who are of the right type, from the point of view of character, men who will be a credit to the medical profession after they have graduated. We connot make our selection solely on the basis of academic standing. We have to go beyond that. It is a difficult thing and I am not going to suggest a process of selection; but we are all trying it in one way or another. When we try to make such a selection of the individual, we find that oftentimes the men of character among the applicants, the outstanding men, are men who have not followed the standardized system of training. We have men who cannot perhaps meet the rigid requirements of some of the licensing boards, yet they are men who we well know will make good

physicians. Dr. MacCallum yesterday afternoon spoke rather scathingly of an applicant who tried to enter upon the study of medicine with a Bachelor of Commerce degree. We have a first-year student whose only degree is that of Bachelor of Commerce.

He entered upon that course in commerce without Latin. After he had finished his course in commerce he decided he was going into the ministry, and he went to another university and spent three more years in theology, and he there made good his deficiency in Latin. After he had been in theology, it was forced home upon him that what was needed in theology was the medical missionary. He started to go into medicine. He applied to three schools and he was told he would have to spend at least one year in making good his preliminary education. After he had been five years in a university, he was accepted and is now in his first year medical school. He is standing near the top of his class. Fortunately he is going to the foreign field and he does not need to get a license in one of the provinces. Are we not overlooking the exceptional, unusually trained individual, in our mass method of choosing those whom we permit to study medicine.

Dr. L. J. Austin (Kingston, Ont.): I have the small privilege of having both studied and attempted to teach. I was at a London hospital after leaving Cambridge, about 1900, and at that time the didactic side of teaching in the final three years had almost gone. There were didactic lectures which we were compelled to attend. That generally consisted of slipping half a crown into the pocket of the man who took the names at the door. That may be bad business, but the bedside teaching was most rigidly carried out, and, like the nurses we heard about this morning, once we had slipped our head into the noose, we only got a fortnight's holiday a year.

A man had to have money before he could ever think of going into the profession. At Queen's, where I come from, many of the men almost put themselves through by working in the summer and taking the entire course in the winter. That was a condition of affairs utterly impossible in the old country. The recruits to medicine in the old country in my day were very largely the product of the so-called public schools and of the universities, and they were content, I think, with the material they got. It did not always turn out satisfactorily. There is a famous analysis of what happened to one thousand medical students who passed through the hands of a certain professor. It worked out as follows: Three attained real distinction in the profession; some twenty were leaders of the profession; 170 did very well; 400 or so made a living happily; 250 disappeared by death or by throwing up their practices; and of the rest, some fifteen were in jail and one was hung for murder. That, of course, was in the old country! I have not taken the trouble to analyze the origin and fate of the medical residents of Kingston!

I think one of the most important things we have to consider in trying to run a medical school is the question of the supply of teachers. That was a thing that was neglected equally, I think, in the old country. Men were placed on the staff and were, per se, expected to be teachers from that moment. We used to have plenty of opportunity of trying to find out whether we were really teachers, because we were expected to teach our students. The trouble about so many appointments is that many a man who knows his work and has most admirable qualities lacks the art of presenting the teaching matter either logically or consecutively. We all know that is true. I think that here is a point for our medical schools to consider very carefully—the appointment of men to their hospital staffs who because of such appointment must necessarily take part in the teaching. The most bitter critics we have of our teaching methods are the students themselves. It is not often that they will come and tell you

personally exactly what they think of you, but one sometimes hears things about one's colleagues that make one feel rather queer in the spine. The students do require to be made to think. That is not easy. There are some types of men who never will think and, unfortunately, have to be crammed. Our system of education is not a perfect one. I believe examinations were invented by the Chinese, who locked up a man in a box and left him there to write down all he knew of everything, giving him about five weeks to do it. I am thankful we do not do that, but, as I say, our system of examinations is far from perfect. I have often been bitterly disappointed in the way a man who "knows" his work has performed in an examination, especially when he happens to meet strangers. I thoroughly agree with cross examination between the different universities. Whether we can have cross teaching in the universities seems to be a much more difficult problem. For instance, I do not know whether Dr. Starr would let me go and take his class for a year, including his income!

We have to remember also that the selection of students is a very difficult business, and the men who have to teach them in the last three years have, in most cases, very little to say about it. Dr. Primrose confesses he does not interview them all.

I do not know that we are going to have a personal interview and select men on intelligence tests. The only educational bodies I believe that really carry that out are the naval schools of Great Britain and the United States, where they necessarily select their candidates very young, and always have a personal interview with the boys and ask them any questions they like, and even then, I understand, the influence of patronage and politics is not always disregarded. The type of man that we get in our own little schools is, I think, a high grade and we certainly use them very roughly indeed in the first year. If they did not make the grade in the first year, afted due warning, they were asked to retire, because they set the pace for the rest. This is one of the methods of educating boys in this country that is so radically different from the method I was used to in the old country. In the old country, if you went to a medical school you made your way up and you went through your classes, and examinations were held every three months. If you did not care to work, you did not work, and if you cared to work, you could work all day. Some men would get through in two and a quarter years, some men in five. The result was we did suffer very terribly with what may be known as a "tail" in the classes and we used to have notorious characters hanging on the classes that would be better eliminated, but, on the other hand, a man of ability and a man of keenness, and that rare bird, who could think, had every opportunity to go his own pace and be carried at the fastest possible pace. He never had to stay behind and sit down and wait for the laggards, who were being driven with the whip in the attempt to reach the arbitrary standard.

The Chairman: Professor Miller will now read his paper on:

THE MEDICAL CURRICULUM

Dr. James Miller (Kingston): In an address to the Royal Medical Society of Edinburgh delivered some ten years ago, Sir James Mackenzie, in dealing with the aims of Medical Education, said:—

"It is well for a man in any work to have a clear perception of his aim, and from time to time to pause and consider whether he is pursuing his aim by the best means. It is particularly necessary for the teacher of medicine to do so. The great tendency of the human mind is to fall into a groove and pursue its work on lines that give no occasion for mental strain. Mental effort is often exhausting, and as years pass it becomes more and more irksome, so that with an everchanging subject, such as medicine, it is well that the methods of teaching should be repeatedly overhauled."

It may be said that we in Canada having just taken a step—a forward one we hope—from a five to a six years' undergraduate course should leave well alone and wait and see how things work out before we discuss the problem again. But for the very reason that a step of this kind has been taken it becomes necessary to begin again readjusting and altering, whittling and paring with a view to improvement. Experience proves that one year is overburdened with work, while in another the student has too little to do. So our task is an unending one and no doubt ten and twenty years hence we, or our successors, will be engaged in the same overhauling process. And yet it would facilitate matters greatly if we could reach, as soon as possible, something like stability and uniformity.

Besides the obvious striving after an ideal curriculum, there are necessary alterations to be undertaken in view of trends amongst our constituents and progress in locomotion and means of communication. For example, as has been pointed out by Dr. Pusey, of Chicago, with the increasing length and consequent expense of the medical curriculum, there is a decided tendency in the young graduate to turn up his nose at practice in out-of-the-way country districts. Having invested some thousands of dollars and spent six or seven of the best years of his life in obtaining his degree, he is not going to waste his fragrance on the desert places of the earth. He is going to settle in one of the larger centres where his patients are only a block or two away and where they can come to him rather than he seek them at a loss of much time and struggles with bad weather and worse roads. Modern methods of transportation are playing into the hands of this type of graduate. The radius of activity of the town doctor is enormously extended by the motor car. Not only can he reach a vastly extended constituency but his less sick patients can come far to seek his advice. The modern hospital too is working in the same direction. The popular practitioner of medicine or surgery can sit at ease in his town office and see his patients there or drive round to the local hospital to visit or operate on his more acute cases, these having come from near and far. And yet there remains, as Dr. Pusey tells us, the problem of the out-of-the-way places. He estimates that if the present state of affairs continues, it will mean that in a generation the rural districts will be without competent medical service. In about 90 per cent of the states of the Union, the older type of medical practitioner as he dies out is not being replaced. We may deplore our closely packed cities and we may talk of a back to the land campaign, but one of the problems of the future will be the difficulty of getting sufficient skilled medical attendance for our villages and more thinly populated areas.

Before actually tackling the subject before us, it is well perhaps to consider who are best adapted to discuss and criticize and make suggestions, and so to determine the policy for the future. Too often it is assumed that it is the teacher in the medical school or the outside critic, the men who have left practical medicine and are devoting their time to science or to education in general—who travel and compare, and then endeavour to the best of their ability to give to those responsible a bird's-eye view of the problem. But as Sir James Mackenzie emphasized in the address already mentioned, there is one person whose views are too often ignored and that is the man who has passed through the mill and has had the experience of finding out how far his equipment really fits him for his work—the general practitioner. Another constituency which should be canvassed, but whose views must naturally be taken *cum grano salis,* is the undergraduate himself who is experiencing the painful process of being moulded into shape. I am afraid that in the old country we paid scant attention to the plaints of the latter, but on this side, with, as a rule, an older type of student, one has insensibly adopted the plan of asking for suggestions from some of the senior men who have perhaps a background of teaching in primary schools.

I think it is well from time to time to try and formulate what it is we, as teachers, are setting out to do. I doubt if this aim has ever been better put than by Dr. William H. Welch, whose school one would say has so notably expanded his (Dr. Welch's) ideals as herein stated. "The very utmost to be expected of the curriculum is to give the student a fair knowledge of the principles and of the fundamental subjects of medicine and the power to use the instruments and methods of his profession; to give him the right attitude towards his patients and the fellow members of his profession; and above all, to put him in a position to carry on the education which has only begun in the medical school. . . . He should be put in a position to continue his own education."

To this excellent statement of the aims of medical education we would, I think, all adhere. But it at once raises the question of how far we should provide in the undergraduate curriculum for the specialist. Certain schools by the mere standard of the preliminary educational groundwork set and the consequent lengthening of the curriculum and increase in cost to the student, insensibly tend to produce the specialist; at any rate they turn out graduates who settle, as Dr. Pusey has shown, almost exclusively in large towns. The ordinary school should, to my mind, have this aim in view to turn out a graduate with a sound general knowledge who can, to borrow Dr. Welch's phrase, "continue his own education" until he has made himself a good general practitioner. It is perhaps (I say "perhaps" because I am not quite sure), it is perhaps well to have one or two specialist schools. The reason for my doubt is this: that the best type of specialist is the man who has had a year or two of general practice. As Dr. Basil Hall so well put it in an address delivered to the Toronto Academy of Medicine in 1925: "Specialism has become a necessity in our modern scheme of medical practice, but surely it behooves us to be careful lest our profession becomes nothing more than a community of craftsmen, each in his own water-tight compartment with little or no general knowledge of the problems which lie outside it." . . . "Everything of something and something of everything," as Dr. Hall says again, "is the motto which all of us should adopt."

Here is a quotation from a letter just received from the Dean of the Medical Faculty of Glasgow University: "The main difference between the old country curricula and the transatlantic ones—as represented by John Hopkins and Flexner's report—is that we believe in a broad medical training as the basis of efficiency. We have special courses in our curriculum, but they are in no way specialist courses. They are not premature forcing houses for specialists. They deal with the things we think every good doctor should know."

But although I am sure that specialist schools should be few in number and preferably post-graduate in time, I am interested, as we all are, in the experiment which the Toronto school has taken a lead, in the experiment of stimulating a medical hobby in the still embryo doctor by a system of options. There is nothing so very new in this encouraging of extra work in special departments amongst undergraduates. I myself, as a student of Edinburgh, spent much of my spare time in the departments of physiology and pathology, and at Queen's University I have working with me every year some half dozen men who, when they graduate, though they are not perhaps always fit to pass on at once to a pathological post, are at any rate in a position to know whether they wish to be pathologists or not. The same is true of many departments in our universities. But it is only in Toronto, so far as I know, that the system is being tried out in the case of every student. Provided it does not deviate energy which would otherwise be expended in acquiring "a fair knowledge of the principles and the fundamental subjects of medicine," to use Dr. Welch's phrase,

the system has great possibilities. The main advantage, to my mind, is that a student when he graduates will have some notion of whether he wishes to specialize and what specialty he would prefer to adopt.

If our aim is to turn out good sound general practitioners, we may next ask what are the elements from which he is put together. What are the main factors which go to produce him? The first is the vague but easily understood, if not easily defined, one of character. It is after all probably the one essential. Place a man of character and grit in a position to acquire knowledge, expose him to it as the saying goes, and, be the teachers bad or good, be the curriculum the worst or the best, he will make good in the end. One is not infrequently surprised at finding men whose opportunities in early life were of the slenderest, occupying first-rate positions. After all, to quote Dr. Welch for the third time, for this type of man all you require to do is to give him the opportunity to educate himself.

Now, although a man's character is often made or marred by the time he comes to college and therefore the matter is of small importance from the curriculum point of view, there is much that the medical school can do to promote or hinder character development, particularly in the students who start their studies young. It is a subject which we do not often consider in our discussions and yet in no profession is character of more moment than in medicine just because the temptations of the doctor are so great. I am tempted, but I shall resist the impulse, to deal with the question of the use of his spare time by the modern student. I shall no doubt be accused of being an old-fashioned fogey, but to my mind a medical student, after the necessary time for fresh air and exercise is allowed for, should have small leisure for the dance hall and the club or fraternity. I am glad to be able to say that of all the faculties at Queen's, the medical is the one which makes most use of the library between the hours of seven and ten in the evening.

But there is one other thing I should like to say in relation to this matter of character fostering in university life—let us as teachers bar the coaching type of tuition. There is no man with the necessary brains (and none but those who have the necessary should be permitted to continue in a medical faculty), no man who has an average amount of brains should require coaching in the purely medical subjects during his undergraduate course. I am not so positive about the preliminary scientific subjects, but with museums and libraries, slides and his microscope, patients at his own disposal, and his own common sense and average intelligence, no coaching should be necessary. An important element in character building, as it is the most important factor in education in general, is that the student should learn a thing for himself. I will say that in this respect the Canadian student is more independent than his colleague on the other side of the Atlantic.

The second requisite of a good medical education is a sound general educational background. I am not going to say much about this, although much can be said. We have probably reached the limit which for the moment we can demand from our candidates for matriculation, but, as education in our schools advances, we should raise our standards accordingly. So long as Latin is the basis of most of our perfectly horrible nomenclature in Medicine, that subject must be retained in the medical matriculation. No medical student should be excused for making use of a singular termination when the plural is intended. Then again nearly one hundred per cent of the students take physics and chemistry in their matriculation, and these subjects should therefore be made compulsory and not optional. As the high schools become more capable of teaching chemistry and physics, it should be possible for the advanced matriculant to be exempted from some of the elementary work in these two sciences.

Speaking on the matter of the preliminary scientific subjects, Sir Edward Schafer said in 1918: "The position I take with regard to the preliminary sciences in the medical curriculum of the university is that they have no business there at all. Five years is the most that can usually be given by the student to the acquisition of the technical knowledge needed by the practitioner, and it is all too short for the essentially medical subjects.... No subjects are more easily taught to boys than the natural sciences.... It is no answer to say that at most schools at the present moment a boy can not obtain such instruction satisfactorily because the school science teachers have not themselves received the necessary training. It is the duty of the schools (and ultimately of the State) to provide suitable teachers and equipment and to offer sufficient remuneration to attract first class men to that as to other branches of the scholastic profession." So much Sir Edward Schafer. Few of us would entirely agree with him, but in the old country there is a movement to make room in the curriculum by relegating the elementary and non-professional parts of subjects such as chemistry and physics, and eventually also biology, to the school curriculum. It is only the beginning of a movement and we are far from being prepared for it on this side, but it offers one means by which the curriculum may eventually be shortened, or perhaps rather by which the available time may be devoted to the more purely medical aspects of these sciences.

Here naturally comes in the question of the advisability of an Arts and Science degree preceding the medical course. By all means let us encourage our future medical men to train their brains more thoroughly before they start their medical work. It is purely a question of whether their purse, or that of their parents', will run to it. A man who has such a course, if he makes proper use of it, is invariably the better for it, but too much can easily be made of cultural subjects in a medical course. English, or some language other than his mother tongue, will always do the student good, but the little he will learn of history and economics in a medical course, he will soon forget. If he is interested in history, as many are, he will in his spare time read it for himself. He will learn what he needs to know of economics by experience. As primary education improves there will be the less need for cultural subjects in the medical curriculum.

The next point to be considered is the teacher. As already indicated, the best type of medical man can emerge from the worst possible environment, professors not excluded. But undoubtedly a teacher can wield an enormous influence for good or for evil. The proper type of teaching is the primeval one—the man with something to say gathers a group of willing hearers and imparts his stored knowledge by precept and by practice. The group should be a small one—the smaller the better. Most of our modern schools suffer from a plethora of pupils. The policy of limitation within the bounds of the facilities available is a sound one when it is enforced. We have during the last few years been passing out of the influence of the war when we were compelled to accept more men than we could teach. All our medical schools should now, after due consideration of their material and facilities, definitely limit the numbers of their pupils. The results recently obtained at some of our higher examinations favour the small school.

Then again the more intimate the contact of teacher with pupil, the better. It is too often the case in these days of large departments that the head is so occupied with administration and research that he has little time to devote to his students. The teaching—more especially the practical teaching, which is the most important—is delegated to juniors who are tyros in the business. The head of the department, in the time he can spare from research and administration, gives sometimes, at most, one series of didactic lectures. Personally, if

there is one thing I make a point of doing, it is to teach my practical classes and do my own autopsies. Almost anyone can deliver a didactic lecture. No, perhaps that is not quite right, but the importance of the didactic lecture is small as compared with practical work, and it is much better that the man with experience should devote himself to the more important duty. It is a pity that so much of the time of a head of a department has to be devoted to administration, and a thousand pities when a good teacher or researcher is inveigled into being Dean of a faculty, especially if he be professor of one of the more exacting subjects.

Research and the direction of research workers rightly bulks largely amongst the duties of heads of departments. No man can teach his best who is not doing research of some kind, but let him restrict himself to matters germane to his teaching and not be led astray into paths widely divergent from what his students learn. Abraham Flexner commends Professor McKendrick for establishing a touchstone for the right type of research for the university professor. He (McKendrick) says in his Life of Helmholtz that part at least of the marvellous activity of Helmholtz arose "from the intimate connection between the function of a professor, whose duty it was to teach, and that of the original investigator. He investigated because he wished to speak of matters at first hand. Again and again he took up a problem, so that he might master it himself and be enabled to make it clear to his pupils." Would that all our scientific medical teachers were imbued with like notions.

One has heard of a certain professor who, although his subject was pathology, was much more interested in the direction of the spiral in the shell of the snail than in what he was supposed to teach his students. It is quite true that we never know where a particular line of investigation will lead, and it is sometimes the case that the unpromising lines lead to important results, but let us, as university professors, leave what we may call the kites of research to the whole time researcher. If we get amongst the clouds, our students may look up to us as pundits but they will ridicule us as teachers. The ideal teacher in a medical school is a man in touch with realities—with the clinical bearing of his subject, when that is a purely scientific one, as well as with the latest advancements in his own line. He should be a man of character and magnetism, who can impress his personality upon his pupil, because that is where the student gets his ideals which are to guide him in his future career. A teacher with high ideals can set the tone of a whole school just as one man with a low ethical standard can poison it. One more point regarding method in teaching. The student insensibly acquires the habit of attempting to attach a label to everything. He seeks to come, as he would say, to a definite diagnosis whether the subject be a gross museum specimen, a microscopic slide, or a patient. What we in the scientific subjects are constantly dinning into him is to describe correctly what he sees irrespective of the question of a label. The same holds good in clinical work. Every patient presents a puzzle problem made up of variously sized and shaped pieces—heredity, character, etc.—besides the various elements in the disease picture. This the physician has to piece together if possible into a correlated whole, to which a name may be given but the name is a secondary matter. The late Sir William Gairdner of Glasgow was never so happy as when he met a puzzle and he would keep a whole roomful of patients waiting while he carefully and joyfully went into the difficult case. This method of induction is the only scientific method of practising medicine, and we, as teachers, are responsible for inculcating it. One last point, which the mention of Sir William Gairdner and his roomful of waiting patients, reminds me of. Let us teach our men the value to doctor and patient alike of what I may call leisured concentration upon the matter in hand. Let us inculcate the necessity of dealing with each case as if it were the only thing

we have to do—as if time were of no importance. How often have we been struck in coming into contact with men high up in the profession with the meticulous care with which they go into a case, however trivial, in spite of the fact that every moment of their time is valuable.

Turning to the matter of that which is taught in the medical curriculum as a whole, we are faced with the problem, the immensity of which appals us. Some of you may have seen, perhaps may even have read parts of an "Inquiry into the Medical Curriculum by the Edinburgh Pathological Club," a volume of 500 pages embracing all the subjects usually taught, and many not usually taught, taken part in by specialists from all departments of medicine, and representative of all branches of the profession from many different schools. I had the privilege of listening to most of the discussions, and on reading some portions of the volume again the other day, I came to the conclusion that there were three fundamental points which have to be borne in mind in arranging or rearranging the medical curriculum.

The first of these three points is that the interest of the student should be enlisted in things human and medical at the earliest possible point. It is not without a reason, as a rule, that the student takes up medicine as a career. His reason may not always or even often be an altruistic one. He may be actuated by motives not altogether worthy and perhaps entirely nebulous. But he usually has some reason for selecting medicine in preference to law or commerce. He has decided to take up one of the many departments of biology and if he is smothered with algebra, higher mathematics, and advanced chemistry in his first year, he is inclined to be discouraged.

It is important that the medical student should have his attention directed to the medical bearings of physics and chemistry. This cannot properly be done unless the man is taught in a class specially arranged for medical students by a teacher who has knowledge of the bearings of the subject upon medicine.

I would say this then about the first year's work in most of our schools. As just stated, something more can now be done to correlate the preliminary scientific subjects with medical work. Then as the high school teaching improves, it may be possible to do two things: (1) to relegate some of the more elementary chemistry and physics to the school curriculum and the matriculation examination; (2) to drop some of the cultural subjects or to substitute other matters with a more direct bearing upon medicine. If we have any doubt about the progress in the standard of teaching in the schools, let us take this somewhat astounding statement from Dr. Alison, Head Master of George Watson's College, Edinburgh: "In Latin and mathematics, the Higher Leaving Certificate (that is Senior Matriculation) papers to-day are fully as difficult as the degree papers in these subjects in the old days (30 years ago), and our pupils are as competent in these subjects as the M.A. of that time." Dr. Alison is of course speaking of Scotland, but the same is true of school education in most countries and the situation is due partly to the boys remaining at school a year or so longer, partly to a more efficient system of teaching. Dr. Alison also said: "In the school curriculum I have outlined, you will see that we (in George Watson's) approximate to the standard of the First Professional Examination in physics and chemistry. If we do not quite reach that standard there is no doubt in my mind that we could by slightly intensified work do so." What George Watson's College does, other high schools can do.

Of course here one is up against the great problem of teaching too much with a special end in view, instead of teaching to educate the brain and the man. But the practical points are first, that a large proportion of students will not be forced to assimilate subjects, the applications of which they do not understand. They may grind them up for examinations but they will not assimilate them. Second, it is a mistake to make a student repeat in the university, work that has been done properly at school.

The second point I should like to emphasize is this, that having once begun an important subject, endeavour should be made to continue it throughout the curriculum in some form or other. The policy of water-tight compartments as applied to the various sciences is not a good one. Let me illustrate what I mean from the time-table of my own subject—pathology and bacteriology—in four schools, Edinburgh, Glasgow, Toronto, and Queen's. It will be seen that at Toronto and Queen's, bacteriology is begun in the third year. In the fourth year, general pathology is dealt with. After this the arrangements at Toronto and Queen's differ, but the subject is carried on by way of special pathology, autopsies, conferences and cases into the final year. On the other hand, in Edinburgh and Glasgow both subjects are dealt with only in the third year of a five years' course. Students are of course encouraged to visit the post mortem room during the two final years, but no specific provision is made for teaching.

Having had experience of the two methods, I have no hesitation at all in advocating the Canadian as opposed to the Scottish. Pathology, and, for that matter, anatomy, physiology and chemistry, are so important to the student in the latter part of his course that these as well as other subjects should be kept up in some form or another until graduation. The Dominion Council have very wisely placed pathology amongst the subjects for their license examination. This of itself is an incentive to keeping up the interest in the subject until the final year.

The last point I propose to take up is that of correlation. If it is a mistake to limit the teaching in a subject to one year or a portion of one year, it is much worse to look upon a subject as standing by itself with no connection with other subjects in the curriculum. The danger of this was not so great when, as was the case often twenty or thirty years ago, the teaching of such subjects as physiology and pathology were in the hands of practitioners of medicine, and the teaching of anatomy in the hands of surgeons. Now, with greater specialization, these subjects must of necessity be taught by men who are giving their whole time to the matter. Such teachers are very apt to lose the broader outlook and to teach, without relation to human disease, its prevention and treatment. This point was strongly emphasized during the Edinburgh discussion already mentioned. Dr. Crerar of Cumberland, one of those who represented the views of the general practitioner, said: "I would say that the greatest defect (of the teaching in his student days) was the lack of co-ordination in the teaching of Medicine and Surgery, and the immediately ancillary—or should I say basal?—so-called theoretical subjects. Everything was in water-tight compartments."

This difficulty can, to a large extent, be got over by the system of conferences. I have dealt elsewhere more fully with the pathological conference and I have pointed out that at such a conference not only the professors of pathology, medicine and surgery, should attend, but the professors of physiology, biochemistry and therapeutics. Let us remember that it was in Canada that the system of conferences arose. It was in 1876 that William Osler, then professor of physiology at McGill, began his Saturday morning conferences at the Montreal General Hospital. Osler was of course singularly well equipped for taking up a case in all its various aspects. He was a professor of physiology who was carrying out the post mortem examinations, and he was at the same time on the clinical staff of the hospital. No one man at the present time could be so well equipped. Hence we must invite representatives of various departments to attend our modern conferences. The success of these conferences depends largely upon the completeness with which the clinical history of the case under consideration is taken. In a properly taken and recorded case, points are sure to arise upon which light can be thrown from different angles. Some little time ago we had the pleasure of a visit at one of our conferences at Queen's from an eminent physiologist belonging to a neighbouring school. His comments shed a com-

pletely new light upon the case we were discussing. Furthermore, the teachers themselves appreciate being asked to take part in such gatherings. They feel that it brings them into contact with the realities of clinical medicine and that it improves their capacity to teach. But let me make it quite clear that the pathology department has no proprietary rights in these meetings. There is nothing to prevent the teachers of clinical medicine or surgery summoning their colleagues to help them to discuss a case.

Let me add that of course the students are present at these conferences and they should be encouraged to write out the case in full, gathering together the various threads in the causation of the main disease, tracing it from the first deviation from the normal through the various stages up to the final; the misfortune of so much of our teaching in large hospitals is that we only see the final stage—the end product. We must try and teach our students to think in terms of the early stages as well, as dear old Sir James Mackenzie was so fond of reminding us. At Queen's we arrange for the presence of the two final years at these conferences, but we find that the fourth year student asks to be permitted to attend, and I am sure that it would be a step in advance to invite the earlier years as well. Much of what transpires would be above the heads of the junior student, but he would take away something which would be of use to him, and his interest in his other studies would be intensified by the practical demonstration of their application to clinical work.

There is much more that I might touch upon. I have attempted merely to keep to certain general principles, which at the same time raise controversial points for discussion. Perhaps I could not summarize my effort better than by quoting our great master, Hippocrates. "Medicine," he says, "is of all the arts the most noble . . . Whoever is to acquire a competent knowledge of medicine ought to be possessed of the following advantages: a natural disposition; a favourable position for study; early tuition; love of labour; leisure."

The Chairman: Before we have a discussion, I shall ask Dr. Prowse to read his paper on

CORRELATION OF LABORATORY AND CLINICAL INSTRUCTION IN A MEDICAL CURRICULUM

Dr. S. W. Prowse (Winnipeg): Mr. Chairman, ladies and gentlemen, the need for increased correlation between the pre-clinical and the clinical content of our curricula which is felt to be such a crying need by many, and perhaps as a desideratum in greater or less degree by most persons interested in medical education, is one of those inevitable consequences of the rapidity with which the standards of that education have in recent years advanced. Twenty years ago little was heard of the need for the correlation in question, because forsooth the so-called scientific content of the curriculum, if we except the venerable subject of Anatomy, bulked much less largely than at present as a time-consuming factor in the years spent at the medical school. To-day, however, the subject is not only productive of much theoretical discussion in and between the medical schools, but is also responsible for a steadily increasing volume of pedagogic experimentation, some of which may prove of value and all of which is more or less interesting.

Of the discussions on the correlation in question to which I have listened, and of the various papers and addresses I have read, all I think have been features of some one or other of the several international conferences with which on this continent we have become familiar, and from which most of us bring away, I believe, a reasonable measure of profit. But the lead in the attacks on this particular evil of "the water-tight compartment," and even the contribu-

tions to the ensuing discussions have been to such a slight extent international and have seemed to interest our southern neighbours to a so much greater degree than it has interested representatives of Canadian schools, that I, for one, perhaps also unconsciously influenced by our experience in Manitoba, have been led to the conclusion that the lack of interdepartmental correlation, while perhaps not to be termed non-existent in Canadian schools, is with us, nevertheless, an evil of lesser magnitude and one at present calling much less loudly for redress than is the case with our Southern neighbours.

As a matter of fact there exists at present among those concerned with the direction of medical education in the United States a constantly increasing dissatisfaction with the whole medical curriculum, including in the term not only the undergraduate curriculum proper but also, and perhaps to an even greater degree, the work of the two premedical University years, and even of the later years spent in the high schools. Viewed with this background, therefore, the particular matter of correlation between various portions of the undergraduate curriculum assumes a more correct perspective, and one is led to seek the cause of an absence of correlation, or of a faulty correlation, among those more general causes that are giving rise to such a degree of dissatisfaction with the whole system of medical training as it exists to-day even in most of the better schools of the United States.

It is no part of my allotted task to deal in detail with these general causes of dissatisfaction with the present day curriculum of the Class A American Medical School. That the dissatisfaction is widespread and genuine all who have read or listened to the proceedings of the Association of American Medical Colleges, or of the Association of State Licensing Boards, have long ago been made fully aware. I have already hinted that my own conviction is that a close relationship exists between the recent unprecedentedly rapid advances of medical educational standards in the United States, and many of the admitted faults in the present day curricula of the schools of that country.

When in the year 1901 the American Medical Association launched its campaign for the reform of medical education in that country, every American lay as well as medical, who had thought of the subject at all, felt that such a housecleaning was long overdue. In other words the campaign in question possessed in an unusual degree the backing of that "enlightened public opinion" without which any sweeping reform is foredoomed to failure. For the American Medical Association's Council on Medical Education, therefore, the going was so easy that in a very few years not only were the requirements for entrance to the medical schools but also the standards and scope of the undergraduate curriculum itself replaced by standards higher and more rigorous by several hundreds per cent than those which had hitherto obtained. Furthermore, and in some respects more important still, these advanced standards of the schools were very rapidly met and rigidly crystallized into legislation by the various state licensing boards. Why then is it felt by most of those best qualified to judge that the finished present day product of the American undergraduate schools does not excel his predecessor of a quarter of a century ago to a degree commensurate with the advances in academic and licensing requirements? An answer to practically this very question is contained in an epigram aptly quoted by Chancellor Capen of the University of Buffalo, "He tried to do too much—and did it." In other words the wave of reform of medical education in the United States succeeded in crystallizing into legislation a set of rigid pre-medical and undergraduate requirements before the schools had had time to evolve the machinery, or had attained the experience that would ensure a corresponding improvement in the qualifications for practice of the men and women they were graduating. With us in Canada, in this, as in many other matters, we have proceeded more slowly. True our medical schools had never averaged so low

as to standards as did the American schools during the later years of last century; but modelled as they for the most part were on those of the Mother Country, our Canadian schools have progressed by a steady process of evolution, while our legislative enactments as to licensure, etc., far from outstripping the schools in the march of progress have, if anything, shown a tendency, at times an exasperating tendency, to lag behind.

Coming back to our water-tight compartments, why exactly should these have developed because of the rigidity of the standards under which our American friends labour?

First. To meet the requirements laid down by the American Medical Association and by the licensing boards, trained laboratory men had in many cases to be sought outside the ranks of the medical profession—a scientist who has himself had no clinical training or experience may teach anatomy or physiology, biochemistry or bacteriology well, but he will not, and cannot as a rule, teach any of these subjects to medical students in such a way as to inspire them with the enthusiasm that comes from the knowledge that every lecture, demonstration, exercise or experiment is to be a vital and essential part of their armamentarium in their future life's work of ministering to the sick. Pathology too may be taught by a non-medical man, but it will be the pathology of the post-mortem room and not the pathology visualized by the physician listening at the end of a stethoscope or by the surgeon making his initial incision at operation, while serology and immunology can be no more than drudgery unless vitalized by a presentation which savours more of the atmosphere of the bedside than of the laboratory, which visualizes even those hypothetical entities complement and amboceptor and antibody as entities within the circulating fluids of a sick human rather than as something of an occult nature, experimentally produced in a rabbit or guinea pig.

Secondly. In the case of many schools the attempt was made to supply laboratory teachers by means of a curriculum so generously elective that the student might be, even at graduation, more or less of a specialist in one or other of the laboratory subjects, and these men sometimes after, and sometimes without an immediately subsequent year or two spent in graduate study of their specialty, were appointed to professorships or other positions on the staffs of these departments. Obviously those men, though possessing a medical degree, were as much out of sympathy with clinical medicine or surgery as were the non-medical science graduates to whom I have referred.

In this connection I wish to disclaim any critical attitude toward a properly balanced elective medical curriculum, but I am critical of any undergraduate curriculum that carries the elective principle to such a length as to aim at the production of a teaching specialist in either a laboratory or a clinical subject unless and until a very liberal minimum of time is spent in the study and practice of clinical medicine and surgery, both before and after graduation. Under any other scheme the trained laboratory man may prove an efficient instructor in a science faculty, but I cannot believe that he will prove an efficient teacher of medical students.

As I stated at the outset, some interesting experiments in departmental correlation are at present in progress; these it appears to me are aimed at meeting the disadvantageous conditions to which I have just referred as obtaining in many of even the better schools in the United States. That a measure of success is attending some of these experiments there can be, from the very standing of their authors, no reason to doubt, but if my appraisal of the inherent causes of these disadvantageous conditions is correct, then the experiments in question can only be considered as curative or ameliorative in nature and not as preventive or prophylactic.

Two such experiments were described in more or less detail at the Omaha meeting of the Association of American Medical Colleges in 1924. One of these experiments sponsored by Professor Perry Pepper, Assistant Professor of Medicine in the University of Pennsylvania, consisted in the institution of medical clinics to the first year class. We can well believe Doctor Pepper's statement that: "No student audience ever tried harder or appeared more interested than does the first year class at these clinics. It is their first taste of the 'real thing' and they are avidly attentive." Equally well may we believe that the difficulties of the teacher in presenting such a course are considerable and that one of his greatest cares must be "in his use of words, constantly remembering that the students have as yet no medical vocabulary." Doctor Pepper's clinics are grouped according as they are designed to attempt correlation with the respective departments of anatomy, physiology and physiologic chemistry, and I may be permitted to cite the subject of one clinic in each of these groups. One clinic was given based on the "Anatomy of the Skull, its value in a case of ophthalmoplegia, localizing the involvement of the third, fourth, sixth and ophthalmic division of the fifth cranial nerve in the sphenoidal fissure due to metastasis of a tumor from the femur."

Correlated to the course in biochemistry was a clinic in which were shown "patients exhibiting altered uric acid metabolism—a case of leukaemia with high uric acid output, a nephritic with uric acid retention, a patient with a uric acid calculus, and a normal rabbit which excretes no uric acid." And based on the physiology of the nervous system was a clinic on "peropheral reflexes and one on cerebral lesions such as apoplexy." Doctor Pepper, while admitting that "final judgment as to the success of his experiment must depend upon the proof that the students gain more than entertainment from these clinics, and that such proof is hard to obtain," expresses his personal belief that the clinics are worth while. Far be it from me to belittle any opinion of Doctor Perry Pepper; he has made a bold attack upon a problem which is evidently a very real one in his school and is entitled to all credit as an ardently constructive teacher and thinker. Yet were I a Scotchman, I should ask for a verdict of "not proven". Were I an American I would for the nonce pose as a Missourian. I am not one of those who contend that under no circumstances and at no time should a first year student enter the hospital; on the contrary I believe that a spare hour should be spent as frequently as possible in observing the procedures in the casualty or fracture room, at the surgical outpatient clinic, at the dermatology clinic, or in a ward laboratory. Some that will be there witnessed will not be understood, but some of it will remain as a part of the sum total of the student's experience; yet I cannot but doubt the wisdom of filching the time required for a series of clinics such as Doctor Pepper's from a year proverbially as full as that of the first year student.

A second experiment was described at the same Omaha meeting by Doctor Don. R. Joseph, Director of the Department of Physiology in the St. Louis University School of Medicine. Doctor Joseph's attack was almost the reverse of Doctor Pepper's. The latter—a clinician—sought the co-operation of the laboratory man to supply the basis for his clinics to first year men. Doctor Joseph—a physiologist—impressed the services of the director of internal medicine in arranging not for the first, but for the third year students, a series of non-clinical symposia based on some physiologic topic—in which after the physiology had been dealt with, the pathologic and clinical aspects of the same subject were presented. At first the course was wholly didactic, but in subsequent years each topic has been dealt with by two students working in pairs, and following an outline prepared by the teachers. One student prepares a set paper, the other discusses it, the class as a whole at the beginning of the course having been instructed by the librarian "how to run down any subject in the original literature, including the use of the Index Medicus, the Surgeon-

General's Index, various abstracting journals, etc." The course occupies one two-hour period per week during the second half of the third year. Dr. Joseph sums up the following advantages from the course: A, to the students: 1. Contact with original sources of information and practice in hunting it out. 2. Practice in preparing and delivering a paper. 3. A review of the fundamentals in the subjects covered by the course. 4. It demonstrates the use of the fundamental sciences and the dependence of clinical medicine upon them. 5. His contact with the literature impresses him with the uncertainty of much of our knowledge and of the weakness of dogmatic statements. 6. It demonstrates correlation and encourages the student to extend his reading on his own account. 7. The work of the fourth year student is better because of the course. B, advantages to the faculty: 1. It develops interdepartmental contacts and a broadened interest and correlation. 2. The time consumed is too small to seriously interrupt the work of other departments.

A third experiment even more novel that either of those I have described has been essayed by the College of Medical Evangelists at Loma Linda, California. The plan was suggested by the "co-operative education plan which has been in operation for over twenty years in the University of Cincinnati Engineering College," where "the students are divided into two groups, one of which is assigned to work in industrial plants while the other goes to school. At the end of each bi-weekly period the two groups change places so that the shops and the school are always full-manned. In the shops the students work as regular workmen for pay . . . the emphasis of the school work is on theory and principles, but these are well inter-related with the shop work by co-ordinators, who visit each student during each shop period, and then meet the several groups during the university periods in special co-ordination classes for this purpose." Describing their own experiment, Doctor Newton Evans, President of the College of Medical Evangelists, reported as follows at the Boston meeting of the Association of American Medical Colleges in 1925: "We felt that a plan of this kind might be applied in medical education and so we have undertaken this experiment. This year we admitted into the medical course a class of ninety students. These are divided into two groups of forty-five each. One group of forty-five spends the calendar month working in a hospital or sanatorium; the other group spends the month in school, and at the end of the month they exchange places. . . . Of the forty-five who are working in the hospital, seventeen are working as orderlies or as general nurses in the wards; five are working as pharmacists' assistants; five are working in hydrotherapy treatment rooms; six are working as technicians in clinical laboratories; three are working in the pathology and bacteriology laboratories; others are working as X-ray technicians; some are working in receiving offices, some on the ambulance, some as medical office assistants. . . . The crux of the plan as to making it a success is the work of the so-called co-ordinators—teachers who are medical men, who are spending their time actually visiting these boys in the hospital and in holding classes with these students on those subjects with which they have come in contact during their month in school. . . . We have the students write essays—themes on some subject or item with which they have come in contact in hospital, some experience which they have had, some patient whom they have met. These themes are corrected and read by the students in the so-called co-ordination classes during their month of school work."

Dr. Evans sums up the advantages of this plan under two heads: First, financially it is a boon to a student to be able to earn from $65 to $90 every alternate month—enough to pay his living expenses during the month in hospital and the succeeding month in school. Second, scholastically he believes the student's various hospital experiences serve as pegs on which to hang the things which he learns in school in a way that he can use them more effectively

afterward. Another good effect is the opportunity which it gives a student for effective vocational choice. In other words, the plan in the opinion of its advocates gives the student an opportunity to know what he wants to do or to be later on—internist, general practitioner, surgeon, oculist, teacher or research worker. From the faculty's viewpoint it is believed to afford an excellent means of judging the adaptability of each student for the practice of medicine.

Other experiments are in progress in other schools, but in medical education, as in medical practice, it may, I think, be taken for granted that where several different lines of treatment are advocated for the same disorder, it is a fair presumption that no one of these lines of treatment has proven entirely satisfactory in meeting the existing indications.

If thus far I have considered only the efforts made to effect departmental correlation by some American schools, it is because, as I have already stated, I believe that these schools have felt the need of such correlation to a much greater degree than have we in Canada. I do not claim, nor I fancy does anyone with any experience in Canadian medical educational methods claim, that the average Canadian graduate has attained on graduation that degree of perfection at which we aim during the years of his training, but I think the claim is a fair one that the average Canadian graduate compares at least favourably with the end result attained by any school in any other country.

I have, perhaps, in what I have read to you, laid myself open to the charge of having indulged in destructive criticism, rather than advocating any constructive policies to ensure a better correlation between the fundamental and the clinical departments, than even our own schools at present enjoy. Being myself neither a graduate nor a post-graduate of any Canadian school, any convictions I have on this question have of necessity been largely gleaned from the experience gained in the particular school with whose policies I have been to some extent identified, and, on this understanding, I, with considerable diffidence, enumerate the following convictions based on our experience in Manitoba:—

First. The director of a pre-clinical department should, whenever possible, be a medical graduate, and what is quite as desirable, he should be a man who has had some years' experience in clinical practice. In no other way can your laboratory man be sufficiently seized of the important contacts between his own subject and those of the later years of the curriculum.

Second.—Attempts at correlation between the pre-clinical and the clinical years will be fruitless unless and until the greatest possible degree of correlation has been effected between the laboratory subjects themselves.

Third.—As a corollary to this proposition there should be the closest possible geographical propinquity of the various laboratory departments to each other and to the hospital.

In Winnipeg we have succeeded in complying with these requirements not to the extent of one hundred per cent, but to a very considerable degree. The directors of each of the departments of, anatomy, physiology, pharmacology, pathology and bacteriology, are all men more or less experienced in general practice, and the same is likewise true of the members of their respective staffs. Our department of biochemistry is under the direction of a non-medical man, at least he has no medical degree, though a trained physiologist as well as a biochemist. With us the departments of biochemistry and physiology have markedly exemplified the truth of the third proposition, I have enunciated. Prior to our becoming a university faculty these departments were located in the science building of the university, some two miles distant from the medical school and from the hospital. During this time there was absolutely no contact between

either of these departments, and any other department, pre-clinical or clinical. On the opening of the additions to the medical school buildings in 1921, physiology and biochemistry became located at the Medical School, and this move may, I think, be said to have been for us the first step in the solving of our problems of correlation. Immediately contacts established themselves apparently automatically between these and the other laboratory departments. Especially were the beneficial results at first noticed in a, to us, previously unknown reciprocity between the departments of anatomy and physiology and between biochemistry and pathology. Since that time both the structure and functions of the central nervous system and special sense organs, to cite no further examples, has been ground common to both departments. While, on the other hand, pathological chemistry equally with physiological chemistry, has been dealt with by the department of biochemistry. With the teaching of anatomy extended throughout the last two years of the curriculum, and with the ever growing demands of the clinicians for blood sugar, blood urea, basal metabolic estimation, etc., a degree of co-operation and of broadened interest has developed that has surprised no one more than the members of the departmental staffs immediately concerned. The clinical men have certainly improved their chemistry, while the non-medical professor of biochemistry has become an ardent student of pathology, serology and clinical medicine. Practically no fortnightly clinical luncheon is held in the hospital at which a member of the biochemical staff is not heard from, while the anatomist and physiologist are frequently, though perhaps slightly less often in evidence.

Then at our clinical-pathological conferences the students of the third, fourth and fifth years are themselvs, as occasion may arise, called up to discuss any chemical or physiological aspects of the cases under discussion equally with the more purely pathological or clinical aspects.

More recently all of the full-time laboratory teachers have organized themselves into what may be termed a pre-clinical club. They meet frequently, generally at the lunch hour, and discuss informally and without leaving their seats, some biochemic, pathologic, or clinical problem which has been brought to their notice since the last previous meeting. To these meetings one or two of the clinical men are invited and they also take part in the discussions. At times these dicsussions are based on some recent striking contribution to the literature in which one or other department is specially interested and it is surprising how easily is a new interest or perhaps an old long dormant interest awakened in the minds of men of other departments. So far no provision has been made for the presence of students at these club meetings; but this should be, and I think may be possible in the near future.

In our teaching of bacteriology one local condition has greatly favoured us. I refer to an old standing agreement made between the Provincial Government and the medical school long before the latter had taken on university status. Under this agreement, based on the transfer of a former property of the medical school, the latter gave an undertaking to conduct the bacteriological work of the Provincial Board of Health and to supply a laboratory for the purpose, and at the time of our absorption by the University of Manitoba, the latter institution assumed this obligation. In practice this has meant that our bacteriologic teaching has included a familiarizing of the students with the various problems dealt with by such a laboratory, including not only the various bacteriological, serological and immunological problems, but also milk and other food examinations, and even many more strictly epidemiological problems with frequent demonstrations of procedures of a medico-legal character. If I hear the criticism that such is not the province of a university department of bacteriology, I can only remind you that I am discussing the opening up of the water-tight compartments, and that although the attendance of students in the provincial

laboratory is not compulsory, yet we find that the training there received is with us highly valued by our students and encouraged by the faculty, not only on account of the correlation it establishes between the departments of bacteriology and the purely clinical departments, but also, and quite as important, because it gives to the students a most desirable orientation relative to the practice of preventive medicine.

The experiments I have described and our own experiences and practices to which I have just alluded, are for the most part inter-departmental in nature. It is quite probable, however, that correlation may be effected to a greater extent than in many cases it is at present, by methods entirely intra-departmental. I have already referred to our experience in this respect in the case of our department of bacteriology, but I am not sure that every one of our laboratory departments at all times emphasizes in its presentations the essential relation and importance of the subject in hand to the work of the clinical practitioner. I would go a little further and express the view that some of the subject matter presented by the laboratory departments—again I am speaking only of Manitoba, although I harbour similar suspicions regarding a good many other schools—I fancy that some of the subject matter on which time is spent in the laboratories and in the lecture room can only, by a stretch of the imagination, be termed fundamental and essential to the rational scientific practice of medicine and surgery. Anatomy has for many years and in many climes been on the defensive in this regard, and I am not sure, in cases where the course of anatomy has yielded to some of such criticisms, that the graduating student has always proved a less efficient practitioner in consequence. In succeeding periods and under different teachers our own course in anatomy has, I am quite convinced, been improvd by ridding itself of certain minutiae non essential to the student save for examination purposes, and never essential to the work of the general practitioner; but my feeling is that to-day anatomy is not the only department whose great need is the cutting out of dead wood. Physiology, it is true, has largely emancipated itself from the tyranny of the frog, but may it not be true that many of the time consuming mammalian experiments for which our laboratories are presently equipped could be dispensed with, or, at any rate, replaced by demonstrations to fairly large sections of the class, without any serious disadvantage to the future practitioner. A constantly recurring argument for the earlier introduction of the student to clinical work is that by such means a more desirable attitude toward the patient is engendered—the so-called "humanizing" influence of the bedside. But why the need of such an influence? Is the attitude of the boy who has completed his two years in arts any less human or any less humane than that of the average boy of his years? The fact that a boy chooses Medicine as a career surely justifies the presumption, at any rate in most cases, that a life spent in ministering to the bodily ills of his fellow-creatures has for him a peculiar appeal. If between his Arts years and his clinical years he becomes in need of "humanizing"—where have we to look for the dehumanizing agencies that have engendered this need.

I hold no brief for the anti-vivisectionist, I have as little sympathy for him as for the anti-vaccinationist, the chiropractor, the Christian Scientist, or any other faddist—vivisection properly controlled has been, is and will be essential to the extension of the boundaries of the art, as well as of the science of medicine—but if clinics to first-year students are necessary because of their humanizing effect, is it not possible that somewhere in the early years of the curriculum is to be sought an agency, some of whose effects are in the opposite direction? May we not have carried the doctrine, "learn by doing," to such an extreme that we find it necessary to start our students "doing" other things to unlearn what some of that doing is teaching them. Both in physiology and in pharmacology, as at present taught, I think much might be gained by the

elimination of what, if it is not deadwood, has yet been a rankly rapid growth of matter, much of which renders the present-day graduate not one whit better prepared for the curing of the sick than were his predecessors who knew not Joseph.

Not long ago I heard a pathologist criticize as an unnecessary duplication the inclusion by clinical lecturers of a consideration of the pathology of the disease which they were presenting. Such an attitude on the part of the laboratory man is, it seems to me, antagonistic in the highest degree to that merging and unification of the fundamenal with the clinical subjects which is the very essence of correlation. As I heard Doctor Louis B. Wilson remark many years ago: "Pathology *is* Medicine, Pathology *is* Surgery." It is not enough for the pathologist to take his students to the museum for a so-called museum lecture, valuable as this may be. The museum in the form of such specimens as best illustrate the disease under consideration at the bedside should be brought to the hospital and should form a part of every detailed clinic or clinical lecture. It is probably the case, however, that a considerable proportion of clinical teachers are pathologists to too slight a degree to assure to this part of the clinic the value of which it is capable. If such be true, the indication is clear that a sound knowledge of pathology, a knowledge achieved by extensive post-graduate study, must be insisted upon as an essential part of the training had by every successful candidate for a position as teacher in a clinical department. But as I view the problem, this is by no means the whole truth. Almost of equal importance is it that the directors of our undergraduate laboratory departments should be men possessing at least two or three years' experience in the practice of clinical medicine and surgery. If they have been general practitioners for some or all of this time in some location remote from a large hospital, so much the better. I do not wish to qualify this statement, except to make it clear that I am now speaking exclusively of the training of the medical undergraduate, the general practitioner of two, three or four years hence. The making of a specialist in one of the basic sciences is a matter of post-graduate or graduate training which probably may be better handled by the pure scientist, but dealing solely with the undergraduate I believe that in some schools the practice of sound pedagogic principles has been sacrificed to the reputation of the teacher for pre-eminence in his special field. The pedagogic principles to which I refer as being so sacrificed may be summed up in a word, as the ability of the teacher to put himself not only in the student's place, but in the place of what that student aims to be in the immediate future—a sound, broad, safe, sane, general practitioner.

In this a heterodox view? Perhaps. It can hardly be termed *radical,* for, as Dr. Primrose reminded us yesterday, the water-tight compartment is a comparatively recent growth, the system under which anatomy, chemistry and physiology were definitely regarded as linked with and preparatory to the clinical subjects deserving, at any rate, the veneration due to age.

The fact that this matter of correlation calls for discussion at all is, I take it, an evidence that we have become perhaps too radical and that a survey of the road we have travelled, if not to some extent a retracing of our steps, may be in order. So if I am heterodox, my heterodoxy is that of conservatism, a type of heterodoxy with which these walls, at any rate, are familiar.

In conclusion I can only state that I offer no revolutionizing *therapia magna* to meet the defects in correlation with which all of us are more or less familiar. I have, however, endeavoured to emphasize what appear to me to be some of the guide posts as we continue to make haste slowly.

To some of you perhaps it may appear an anomoly that anything so conservative should come out of the West; yet there are those even on the nether side of Lake Superior who are loth to believe that everything that is old is

necessarily bad, or that everything that is new is necessarily good because it is new. To me it appears that only when every laboratory teacher of undergraduates is a clinician of some experience and every clinician a man who has kept himself reasonably abreast of the advances in each of the laboratory subjects, will this problem of correlation entirely have disappeared.

Dr. MEAKINS: I would like to take this opportunity of congratulating the speakers to-day on their addresses. They have been full of so much controversial matter that I will not have time to deal with it at all, although I would like to speak to a few of the statements made.

Medical education is a subject which has been much tampered with during the last twenty years. In regard to professorial exchange, I am extremely in favour of it if we could bring it about as it was a couple of centuries ago. I think it would be good, not only for the teacher, but also for the student, and would broaden our outlook on life.

Dr. Ramsay made reference to the question of examination for well people. I always teach my students, that an individual only goes to a doctor for two reasons—one when he is uncomfortable and the other when he cannot earn a living. When we consider a physical examination, we are dealing with science. As it was pointed out years ago by Sir James McKenzie, the essential and early evidence of disease is to be found in symptoms. In our medical education we do not emphasize the importance, the significance, the interpretation, and the cause of symptoms, sufficiently. The symptom will appear and disturb a patient long before any pathological signs are in evidence that anything is wrong.

I heard several speakers use such terms as rigidity of curriculum, stability and uniformity of curriculum, etc. I hope that reference was made to the individual university alone and not to a nation-wide rigidity or uniformity as regards medical curricula. An attempt was made at that in 1919; I was bitterly opposed to it. Do not cramp our university independence. As you said yesterday, sir, lay down the minimum of what is wanted, and after that, let the university or teaching school work out its own salvation. If they cannot do that, withdraw permission for their graduates to become doctors. I want to register my emphatic protest against any suggestion of nationwide uniformity or stability of curricula. A curriculum can never be stable; it is going on and on and on year after year. The wise universities are those who are going to make it an evolution rather than a revolution.

With regard to research work, no professor is worth anything to a university unless he also carries on research. I grant you, exceptional individuals will allow their teaching to go by the board or allow it to become one-sided on account of their constant thinking of something else. It is an exceptional thing for a man who has his heart in teaching and research to allow these things to come into conflict. If he allows it to occur, then that is a matter for his university to deal with. Many universities like it; that is their business.

For a science to be taught with one eye on medicine four years hence, and another eye on science at the moment, I agree with Dr. Tory, is entirely wrong. We will not get good men to teach scientific subjects if they have to do it in such a manner that it takes away the whole zest of science for them. After all, they are in science at a mighty small salary, and are doing it for the love of science and not for any utilitarian purpose. If universities want men who are willing to prostitute their scientific minds to that attitude, I do not think it is a good educational policy. If they are going to teach students science and also teach them religion, do not let us try to teach them both at the same time with the object of making them medical missionaries.

In regard to correlation, I agree with Dr. Prowse. I think his paper has a tremendous amount of common sense and food for thought, but, Mr. Chairman, I would like to make this statement. I think the place where the correlation is

needed most is between medicine and surgery. If we had proper departments of medicine and surgery, I think the whole question of correlation and its effect on future practice would be wiped away. I think in many of these questions of education we get the cart before the horse.

Our great difficulty in North America to-day is teachers. In 1906, when it suddenly dawned upon the United States that their medical education was wrong, they woke up and said, "We must do something about it." They closed up all the schools they could, and then there came in an enormous new schedule. They were going to have full time teachers, and now they are wondering where they are going to get the teachers. North America is a country of revolution and experiment, they have suddenly disrupted their medical curriculum and they find they have very little left to build on. The older schools in Boston and Philadelphia still stand four-square to the wind. They are going to go on, year after year and decade by decade. They will learn by other people's mistakes. I am a little vehement on this question because I feel that this tendency to revolution may strike at the heart of our whole medical tradition and education in Canada. We have a wonderful tradition, but let us retain it, gradually building and improving it, depending more on evolution than on revolution.

The CHAIRMAN: Dr. Hattie, you were to discuss these papers. Dr. Meakins had to leave, and, therefore, I asked him to precede you.

Dr. HATTIE: I might preface what little I have to say by remarking that the change in the program provided me with the very exceptional and enjoyable experience of hearing peal after peal of my thunder rumble from mouths other than my own. I have had a most enjoyable afternoon. Not merely the papers to which we have listened but also the discussion that has gone on have been of a very high order and full of suggestive thoughts. Personally, I am grateful to every one who has had any part in the program this afternoon. Of course, the thing that everybody engaged in medical education has to do is, so far as possible, to ensure the turning out of young men who are reasonably prepared to enter upon the practice of medicine. We must admit that reasonable preparation necessitates a thorough scientific grounding for all the work they will be expected to do. To a certain extent the opinion prevails to-day, even among the profession, that the thorough-going scientist is a hard-hearted mortal who, when he takes up the practice of medicine, is not satisfied until he has exhausted every possible avenue of approach in order to arrive at a diagnosis, and then goes and waits impatiently for the death of the patient and the autopsy in order that his diagnosis may be confirmed. Such a conception certainly paints the scientist in very dark colours; it leaves out the human element. I think it can be truly said that the medical profession of the present generation is not so lacking in humanity, and I hope that coming generations of medical men will be as humane as the present generation is. I have little fear of scientific training hardening the heart of any man, but possibly it would be as well if the type of scientific training could be that of a man who has been referred to more than once this afternoon, Sir James MacKenzie, because I think we will all agree that the contention of Sir James that a study of the symptoms is the most important part of the study of a case, is sound fundamentally.

There are so many things that one might take up that one hesitates to venture into a discussion at all. But I must refer to at least two things that particularly stand out in medical practice: first, that the principal duty of the physician if we except efforts at prevention is to save life, and after that to mitigate suffering. It is sometimes said, and possibly not without reason, that these things are not sufficiently considered by medical teachers, and that an undue share of time is devoted to matters that are of interest from the academic rather than the practical side.

There are conditions which come on so acutely and run so rapid a course, and are so very apt to prove fatal, and which, as a matter of fact, enter very largely into our mortality statistics, that it does seem to me that in the education of the medical student very particular attention should be given them, primarily for the sake of saving life. Yet pneumonia, a condition accountable for a very large number of deaths, in the ordinary teaching of medicine, gets less attention than such a condition as pernicious anaemia, which is not so very common. There are other conditions which do not come on acutely which run a very slow course, which disable the patient for years, preventing his family for a long time realizing on the life insurance. Tuberculosis is an example. In the teaching of the student such conditions also should be emphasized; and it is perhaps here that attention should be directed as much to the mitigation of suffering as to the saving of life. These are offered as illustrations of the importance of selecting subjects for special emphasis.

Another matter to which I might refer is that the student should be made to realize that the conditions under which he will practise his profession in the homes of the people, particularly in the homes of the poorer people, are entirely different from conditions with which he becomes familiar in the hospitals. It seems to me that perhaps that is really one of the weakest of the links in our chain, that the medical student does not get the opportunity of seeing and experiencing conditions under which treatment must be carried on when he goes out into private practice. We at Dalhousie send out some of our final year students to study conditions in the homes of some of those who come to our out-patient clinics. Some of the men look upon this as rather a nuisance. They write their report, and unless they are called up to have the report discussed, nothing more will be heard from them. On the other hand, many of these students will come in and will say that they have been horrified by the conditions they have found, and say, "What in the world can a medical man do to relieve conditions of that sort?" I say to them, "The medical man must learn that he has social problems to deal with, economic problems to deal with, and many problems that are not strictly medical, that are so closely allied with medical problems that they must have consideration." Is this not a matter of sufficient importance to warrant our attention?

The CHAIRMAN: Any other speakers?

Dr. E. STANLEY RYERSON (Toronto): I do not want to delay unnecessarily the course of the discussion, which has been very full. If one attempted to enter into a discussion of the innumerable points brought up it would take too long. The point on which I would like to lay stress is the necessity for better teaching and better teachers, which was brought out by Dr. Meakins. To my mind, the important factor in developing good teachers and good teaching is for them to realize that the centre of the medical course is the student, and that in teaching a student one has to teach him in such a way that at the end of his course he knows how to teach himself; that, as he proceeds through life, he will continue to educate himself, keeping up-to-date and being able to carry on his own education. That is a principle that is extremely important and one which we are apt to lose sight of in our medical schools. To my mind we have come to the stage of over-teaching and do not leave enough for the student to learn by himself in the way of reading, investigation of patients, and so on.

Another point that came out in an investigation I made of our first-year students this year is, I think, rather important as indicating the trend which exists in the students' minds as regards their medical education. I personally interviewed each of some one hundred and forty men in our incoming first year, and among various questions which I asked them was one with the idea of getting at what the individual student's future mission was with reference to

the practice of medicine. The answers to that question were grouped under a number of different headings, general practice, specialism, whether his intention was to do academic work, etc., or whether at the present time he was not able to determine; for it is obvious that a man beginning his course has no idea of what the actual work of medicine consists of. As I say, I was interested in trying to find out what the point of view of the students was as to their future practice. The answers which came in as a result of questioning them showed that twenty-four, or 17.9 per cent, proposed to enter general practice. As a matter of fact, a survey of this type was made for the Commission on Medical Education in the United States, of men who had graduated five and ten years previously, and it showed that twenty-two per cent of them were in general practice; and here at the beginning of the first year only twenty-four persons expressed their intention of going into general practice. Those intending to be specialists numbered sixty-nine, constituting 50 per cent. It is rather interesting to classify these to see what their ideas in that regard were. Thirteen did not specify. Thirty-seven were going to be surgeons. Some of these had selected the particular type of surgery—brain surgeons, orthopedic surgeons, or specialists in other fields; three, eye, ear, nose and throat; six, pediatrics; two, psychology; four, radiology; six, medical missionary work, and only seven academic work. Twenty-eight were indefinite and had no idea of what they proposed to do. Now if 50 per cent of the men before they start their studies think they are going to be specialists, it seems to me it is not entirely a result of the curriculum, but rather an interpretation of the attitude of the general public at the present time and the feeling that the men have in that regard.

One other aspect of this investigation was to try to find out the number of men who were financially educating themselves. There were nine men who were proposing to pay their own way through the medical course. Forty-five were at that time paying part of their way through the first year, and there were eighty-one in the first year who during that year were not paying any of their expenses. Of these, forty-eight said it was their intention during the coming summer and following summers to make enough money to put themselves through. I asked a similar question of a group of our present final-year men. Ten had put themselves through entirely. Ten had not paid any of their expenses; the other 80 per cent had partly put themselves through. I think these figures are rather interesting as indicating the percentage of men who are trying to pay their own way for medical education in Canada at the present time.

Dr. H. W. WADGE (Winnipeg): It may be rather audacious of me to attempt to discuss the problems which have been presented this afternoon. I am simply a family physician. I am not even a member of the staff of a hospital. However, there are certain points which appeal to me. The first one relates to that of teaching in the colleges. In observing the work that is being done, and from studying the different men that are on the college staff and the results shown by the graduates, I have found that some of these professors are proficient, are doing excellent work, and are appealing to their students, while others are not. This applies not merely scientifically, but also as regards their character. That is one of the reasons, perhaps, why so many of our young men are not doing so well as they should do in after life. It is not merely a man's own character and conscience as these were at the time of entry, but it might be due partly—I have been led to believe so, at any rate, from some of the men I have talked to—to the example that is set before them by some of the professors under which they receive their education.

Now, my first idea is that a professor should be a teacher, whether or not he is altogether a highly scientific man. It is desirable to have that too, but if he is scientific and hasn't the ability to teach or to understand the students, so

that he can bring them to think and study things for themselves, then he is in the wrong position. He should first be a teacher. I think also he should next be a clinician. At the time I graduated from the Manitoba medical college—I do not know whether to be sorry for it or not—there wasn't so great a development in the laboratory side of the work as there is now; but such success as I have had has been due to the clinical work which was given me at college and to the incentive to continue such clinical work in my own practice outside. When I left college I went out on the prairies. As you know, we have vast prairies in the West and we haven't enough men to fill them, partly because they are attracted across the line by the larger salaries and partly because the medical students, observing the high fees which the specialist receives, are inclined to specialism, as Dr. Ryerson has just intimated. To my mind, medical students should all be so taught that their first work would be as clinicians and as family physicians and let them go on afterwards, if they wish, to other lines of work. I think also the State should have some say as to what shall happen to these young men.

I made an estimate last year from the figures as given by the University of Manitoba. It cost the university $300 a year for each student in medicine. It cost the university $2,000 for each medical graduate for his course, I presume a similar cost is found in other universities, roughly $2,000. As far as I can estimate 20 per cent to 25 per cent of these graduates leave for other countries to practise. There is a large economic loss to this country in the number of graduates that leave our land, and at the same time we have districts requiring medical service and requiring it badly. We should have our schools established, to my mind, in such a way, with the emphasis on the clinical side of the work, with the idea of having our men fill our own positions at home and supplying all our communities with medical service.

The CHAIRMAN: My contention is that men should be taught to use the scientific methods in physics, chemistry, anatomy and physiology, at the bedside. We insist, in the University of Toronto, that anatomy shall not be restricted to the primary departments—that up to the final years the students shall be taught this subject. The same thing applies, although not in the same systematic way, to physiology. Then as to the modern evolution of clinical instruction: In a well-organized clinical department in medicine you will find, perhaps, a teacher who is qualified to teach the application of chemistry at the bedside when such service is required, another clinical teacher who is specially qualified to apply the methods of physiology, and so on. We are all agreed that these sciences should be interwoven into the clinical subjects, although we are not entirely agreed as to the method. While, therefore, there is a great deal of common agreement in the methods adopted by various schools we do not desire uniformity. Personally, I shall not be satisfied until I have had an afternoon with Professor Miller and talked the whole subject over with him, with the object in view of coming to a common agreement.

Dr. MILLER: I think I was the culprit, Mr. Chairman, who used the term "uniformity". Now I did not mean only what Professor Meakins meant by his use of the term "uniformity". I did not mean that every school should be an exact counterpart of every other school. I thoroughly believe in what he emphasized—each school working out its own curriculum according to its facilities.

Then there is this question of watertight compartments. I have been connected with four universities and medical schools in my career and in two of these, physics as taught to the medical student was the chief stumbling-block in the early stage of the curriculum. It was taught by a pure scientist, a man

high in the estimation of his fellows; but it was taught so high above the head of the student that he did not understand it—did not take even the trouble to listen to it. Sometimes it has been the case that the more eminent the physicist, the less qualified he was to teach the junior student. We all know the story of Lord Kelvin, at that time Sir William Thomson. His assistant, Dr. Day, was taking his place in the lecture room during the temporary absence of the great man; on the last morning before Sir William's return a voice from the back benches called out, "Work while it is Day, for the Knight cometh when no man can work". My contention is that medical students should be taught their physics in classes by themselves and the teaching should have a definitely medical colouring.

That is all I have to say except to thank you for the way in which you have received my remarks. I think that probably we have a greater degree of uniformity than perhaps is visible on the surface.

The conference adjourned.

WEDNESDAY MORNING SITTING

The conference reassembled, Dr. Primrose in the chair.

The CHAIRMAN: Dr. Noble will read a paper on Medical Legislation, introducing that subject for discussion.

MEDICAL LEGISLATION

Dr. ROBERT T. NOBLE (Toronto): Mr. Chairman, ladies and gentlemen, in attempting to deal with this subject I have not strictly adhered to the exact letter of the statutes, and I hope that representatives present will discuss the matter freely as to how the various Acts are working out in their respective provinces.

When this province became a separate colony in 1792 there were *no regulations* as to who should practise physic.

In 1788 the old province of Quebec passed an ordinance forbidding anyone to practise without a license from the Governor, which license was to be granted *without examination* to all graduates of any British university and to all surgeons of the Army and Navy.

In 1795 the Provincial Parliament of Upper Canada passed an Act forbidding the sale of medicine, prescribing for the sick or the practice of physic, surgery, or midwifery, without a license.

The Governor was to appoint *a board to examine all* who applied for a license. (First time when passing an examination before a board becomes a requirement.) An exception was made for surgeons in the Army or Navy and for those practising at the passing of the Constitutional Act in 1791. The Act of 1795 was a very comprehensive one. (Chapters I, II, III, IV, The Statutes of His Majesty, Province of Upper Canada.) The Quebec Ordinance of 1788 no doubt formed the ground work and the originator and framer was likely Attorney-General John White, who came to Canada in 1792.

The board, if any was really appointed, consisted of "certain regular-bred surgeons, appointed by the Governor." Few could fulfil the requirements or stand the examinations of such as were regular and well-bred and well-educated. Canniff says how absurd then to think of preventing the remotely scattered people from choosing whom they liked to draw their teeth, bleed or blister, and

that a poor woman in labour could not have assistance from a handy neighbour without her benefactress being in danger of a fine. Unworkable as it was, this Act was in force ten years.

The profession was at large from 1805 until 1815, when an Act similar to the one in 1795 was passed, except that it was provided that *women might practice midwifery without a license*. This Act was repealed in 1818 and an amendment in 1819 created a *Board of five to examine*, the successful ones being granted a license by the Governor. This board with some changes continued to sit until 1865.

In 1827 the Act was again amended and certain ones were granted a license without examination. Practising without a license was made a misdemeanour.

In 1839 all previous legislation was repealed and members of the board under previous Acts were formed into a corporation to be known as "The College of Physicians and Surgeons of Upper Canada." Through the efforts of the Royal College of Surgeons, London, England, this Act was disallowed by the Home authorities in 1840 and the former Act came into force.

In 1859 Homeopathy was recognized as a lawful system of medicine. A board of five issued certificates and the Governor granted a license.

In 1861 the Eclectic School received legislative recognition and a board of seven were to examine and certify and the Governor license.

In 1865 an Act was again passed abolishing all boards and a "General Council of Medical Education and Registration of Upper Canada" was formed, composed of one representative from each college authorized to grant medical degrees, and twelve elected by the profession. Those entitled to register were:—

1. Those formerly licensed from Upper and Lower Canada.
2. Those certified from four Upper Canadian universities or any university in the British Dominions.
3. Those having a diploma of the Royal College of Surgeons or of Physicians of London, registered under the Imperial Medical Act or commissioned physicians or surgeons of the British Army or Navy.

These licenses were all of high standing. Council might fix matriculation standards and also the curriculum to be observed by the medical colleges.

Some slight changes followed. Then two years after the birth of Ontario, "The College of Physicians and Surgeons of Ontario" was incorporated in 1869. Besides one from each of the universities, colleges and medical schools,

Twelve were elected by the regular practitioners,

Five elected by the homeopaths,

Five elected by the eclectics.

A Register was provided for:

1. Those practising before January, 1850;
2. Those already registered;
3. For all future aspirants, a Board of Examiners was provided.

(This is important in view of what is happening to-day.)

Homeopaths and eclectics were not to be examined in materia medica, therapeutics, theory or practice of medicine or in surgery or midwifery (except the operative practical parts thereof), by any but those approved by the representatives on the council of his school of medicine.

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After the Act of 1874, the board of five eclectics were to continue for five years only. From this, until 1923, the Act on five different occasions was only slightly amended.

Then we come to the Act of 1923. I will read the following sections:—

47*a*. Every person shall be deemed to practise medicine within the meaning of this Act who holds himself out as being able to diagnose, treat, operate or prescribe for any human disease, pain, injury, disability or physical condition or who shall either offer or undertake by any means or method to diagnose, treat, operate or prescribe for any human disease, pain, injury, disability, or physical condition.

47*b*. Nothing in this Act contained shall apply to or affect:—

(*a*) any commissioned medical officer serving in the army, navy, or marine hospital service;
(*b*) Any lawfully qualified physician in any other province or country meeting a legally qualified medical practitioner in Ontario in consultation;
(*c*) Any person actually serving without professional fees on the resident medical staff of any legally incorporated hospital in Ontario;
(*d*) The furnishing of first-aid or temporary assistance in cases of emergency;
(*e*) The domestic administration of family remedies;
(*f*) Persons treating human ailments by prayer or spiritual means as an enjoyment or exercise of religious freedom;
(*g*) The practice of chiropody.

47*c*. Nothing in this Act shall apply to or affect:

(*a*) The practice of dentistry by a dentist duly licensed under the Dentistry Act to practise dentistry in Ontario:
(*b*) Any person who manufactures or mechanically fits or sells artificial limbs or other appliances;
(*c*) The practice of optometry by an optometrist duly licensed under the Optometry Act to practise optometry in Ontario.

47*d*. (1) A person not being a legally qualified medical practitioner who was on the 1st day of January, 1923, practising in Ontario as an osteopath, chiropractor, or drugless healer and who within sixty days after the coming into force of this section files in the office of the Provincial Secretary a statement in the form to be furnished by the Provincial Secretary, stating: (*a*) his name in full; (*b*) his place of residence; (*c*) his degree or certificate of qualification or other document under which he claims to be qualified to practise; (*d*) evidence as to his character and good behaviour, and (*f*) the particular method which he is practising, shall not incur any penalty under this Act for the practise of medicine under this Act so long as he continues to practise according to the method named by him in such statement.

(2) There shall be kept in the Department of the Provincial Secretary a list of all persons who have filed statements as required by subsection 1, classified according to the several methods of practice named by them.

47*e*. The Lieutenant-Governor in Council may make regulations providing for the admission to the practice of medicine of persons professing any system of healing and prescribing the qualifications to be required of such persons.

The passing of this Act made some drastic changes; for the first time "The Practice of Medicine" was defined—47*a*.

Persons not legally qualified medical practitioners were disposed of as follows: 47*d*. The real joker was 47*e*. 58 (2) sounded well but was not fruitful of many prosecutions.

58 (2) Every prosecution under this Act shall be undertaken and conducted by the Crown Attorney of the county or district in which the alleged offence was committed, whose duty it shall be to see to the enforcement of the provisions of this Act.

The amendments of 1923 proved unsatisfactory, and, after much heated discussion, the Act was again amended in 1925 with very drastic changes—47*a*, *b*, *c*, *d* and *e*, and also 49 and 58 (2) were dropped. This eliminated the definition of "the practice of medicine" on which so much dependence had been placed, but the constant changes, so that what was true yesterday is not so to-day, made any definition a real handicap.

Forty-nine is a radical change and is now being tested out in the courts.

49. (1) Any person not registered pursuant to this Act, who takes or uses any name, title, addition or description implying or calculated to lead people to infer that he is registered under this Act, or that he is recognized by law as a physician, surgeon, accoucheur or a licentiate in medicine, surgery or midwifery, or who assumes, uses or employs the title "Doctor," "Surgeon" or "Physician" or any affix or prefix indicative of such titles as an occupational designation relating to the treatment of human ailments, or advertises or holds himself out as such, shall incur a penalty of not less than $25 nor more than $100.

The amendments of 1925 made necessary the passing of the Drugless Practitioners' Act. This provides for a Board of Regents which now consists of two osteopaths, two chiropractors, one legally qualified medical man—the Act only provides that it shall consist of *five persons* to be appointed by the Lieutenant-Governor in Council.

No. 5 in this Act is very important:—

5. Nothing in this Act or the regulations shall authorize any person not being so expressly authorized under a general or special Act of this legislature to prescribe or administer drugs for use internally or externally or to use or direct or prescribe the use of anaesthetics for any purpose whatsoever or to practise surgery or midwifery.

The regulations of the Board of Regents sets out the meaning of the designation of the various drugless practitioners under its supervision, and prescribes the preliminary education, the requirements and examinations for each cult.

These very drastic changes in our Medical Act were doubtless brought about from the fact that Ontario had been an open field for all kinds of irregulars since 1915, when Mr. Justice Hodgins was appointed to make his investigation and report.

Practically the same thing has been done now as in 1859 and in 1861, when the homeopaths and eclectics were recognized and had their respective boards—finally to become absorbed in our College of Physicians and Surgeons. Is there to be any limit as to the number of cults our College of Physicians and Surgeons may be asked to absorb? Too free an absorption might cause a dilution beyond what is desirable, as we will have to deal not only with one body, as in the days of the homeopath and the eclectic, but many bodies, which are already on the horizon, and we may be sure many more will appear as time goes on.

The drugless practitioners, apparently, sooner or later find their particular system too limited, as evidenced by their request to give anaesthetics, do minor surgery or obstetrics and sign death certificates. What is this but a limited practice of medicine, and are we to have two standards of medical education, the confines of which I can assure you will be much more difficult to define than anything we have had heretofore. Until drugless practitioners are willing and prepared to qualify as legally qualified practitioners, to my mind they are better to be supervised and taken care of by their own Board of Regents.

The legislation of 1925 is a distinct advance over anything we have had—we were not asked to absorb any cult and our College of Physicians and Surgeons can truly be said to register only regularly qualified medical men who have complied with all our regulations and passed the necessary examinations.

The Board of Regents has committed to its care those who must comply with its regulations and pass prescribed examinations before registering as osteopaths, chiropractors, chiropodists, drugless therapists or masseurs.

Section 49 of the Medical Act and section 5 of the Drugless Practitioners' Act are being lived up to by a number in these groups—the discipline of the others can be safely left to the Board of Regents, as set out in section VIII of their regulations.

Many complaints were made to our college *re* the continuance of the title "Doctor," "Physician" and "Surgeon" by some of the drugless practitioners. The verdict of Magistrate Jones is being appealed to come before a senior judge—the verdict will be looked forward to with great interest.

Is there a danger of developing two standards of medical schools or medical education? So long as section 49 of the Medical Act and section 5 of the Drugless Practitioners' Act are enforced, one can scarcely think of that being possible, particularly if no barriers are placed in the way of allowing any of the cults to register in our colleges so long as each candidate fulfils all our requirements and passes our prescribed examinations. Having become legally qualified medical men with all the privileges, they can practise any system of healing they may choose.

This whole situation should be a challenge to our teaching bodies. They should ever be quick to investigate any system of healing and, having carefully sifted the wheat from the chaff, give what is worth while to our students so that, when they graduate, be it massage, manipulation, hydro, helio or electric therapy, they will be competent to treat their patients intelligently along these or any other lines which may, from time to time, become, if not truly scientific, at least psychologically advisable.

No one registered under the Drugless Practitioners' Act can use the term Doctor, Physician or Surgeon, "49", or use drugs internally or externally, nor give anaesthetics or practise surgery or midwifery. Drugless Practitioners' Act No. V.

The Board of Regents should become a sort of clearing house or holding company, most of the members remaining under discipline with the board, a few desiring to go on may be able to meet all the regulations and requirements of the College of Physicians and Surgeons and become fully registered members.

In British Columbia, for example, the college registers, in addition to legally qualified medical men, osteopaths, chiropractors, drugless therapists. There are some requirements common to all and certain requirements for each, peculiar to the particular system followed—registered members of each class may designate themselves, Doctor, Physician or Surgeon, and enjoy all the privileges of membership.

In the Ellison and Pocock case before Magistrate Jones, an attempt was made to show that the title "Doctor" was not an occupational designation at all, but merely indicating a degree of attainment.

Surely this is stretching the point, but it does seem incongruous that whether as an occupational designation or a degree of attainment that graduates of schools with varying requirements and all attempting the treatment of bodily ailments should be known to each other and to the public by the same designation of doctor, physician or surgeon, as the legally qualified practitioner.

The viewpoint of a layman is illustrated in the fact that on February 11, 1927, George Bernard Shaw, speaking at the opening of the Osteopathic Clinic for the Poor, in London, England, declared that the Medical Council has no right to register a man unless he has the technique of osteopaths at his fingerends. This, he says, can only be done by including osteopathy in the curriculum of the medical schools.

The Canadian Medical Association has organized a Committee on Legislation, and, as Dr. G. S. Fairene, the chairman, points out, the duties of such a committee will involve to some extent medico-legal legislation in each province. He asks for the co-operation of the College of Physicians and Surgeons of each province to evolve some means of unifying to a greater extent, than at present, medical legislation in the different provinces, and, Mr. Chairman, I would like to see this Conference on the Medical Services in Canada do everything possible to assist the committee of the Canadian Medical Association toward this end.

The CHAIRMAN: You might perhaps be good enough, Dr. Noble, to explain the cases you referred to which came before Magistrate Jones, for the information of those present who may not be familiar with it.

Dr. NOBLE: In February, 1918, there were two cases up in court—one taken against an osteopath and the other against a chiropractor, for the use, primarily, of the title of "Doctor." After a hearing before Magistrate Jones he gave it as his opinion that the osteopaths and chiropractors could quite legally continue to use the term "Doctor." This decision has been appealed and will probably come up in the Supreme Court early in April or at least before the 1st of May.

There are two outstanding conditions in the Dominion to-day. I have gone rather fully into the conditions existing in Ontario, because to my mind the Ontario Medical Act is the best provincial Act of its kind that has been passed up to this time. In British Columbia the very opposite condition exists. They accept medical men much on the same terms as we do. Osteopaths are accepted on passing an examination in certain subjects. With your permission, Mr. Chairman, I would like to just read from their Act the following:—

"Provided, further that before any such osteopath shall be lawfully entitled to practise osteopathy within British Columbia, such osteopath shall take and successfully pass an examination satisfactory to the council in the following subjects: "Anatomy, physiology, chemistry, toxicology, pathology, bacteriology, histology, neurology, physical diagnosis, obstetrics, gynecology, minor surgery, hygiene, medical jurisprudence, principles and practice of osteopathy."

I submit that for any irregular group to be allowed to practise obstetrics, gynecology, and minor surgery without having passed and fulfilled all the requirements of the College of Physicians and Surgeons, is an injustice to the regularly qualified men, and how they hope to limit osteopaths who have by passing this examination become members of the College of Physicians and Surgeons, with all the powers of a member—how they are going to prevent an osteopath, for example, who is permitted to do minor surgery from doing major surgery, I fail to understand. Who is going to draw the line?

Now, with reference to the chiropractor, he has to pass all these subjects with the exception of toxicology, bacteriology, obstetrics and minor surgery. In other words, he is allowed to practise gynecology, but must not practise minor surgery or obstetrics. Who is going to keep track of that, and how are they ever going to keep their skirts clean from these various groups?

We come to the drugless therapist. He must pass all these examinations the same as the osteopath, except toxicology, bacteriology, obstetrics and minor surgery. He is apparently allowed to practise gynecology.

In the Ontario Act the very opposite obtains. I think we are fortunate in having in the Prime Minister in that province a man who is the son of a doctor. When we called upon Hon. Mr. Ferguson, he said: "We will draw a line; we will make a definite distinction between those who are legally qualified medical men and those who are not." The legally qualified man shall consist of those who have filled the requirements and passed the necessary examinations of the College of Physicians and Surgeons. I would like to hear from representatives of British Columbia just how they carry on with their Act as it exists to-day. In Saskatchewan apparently they are having difficulty, and there has been up before the House for some time now efforts to create an amendment to the Act. The difficulty there seems to be that the regulations passed for the chiropractors have been so far above and beyond their heads that, for the last ten years in Saskatchewan, there has not been one application for examination to pass the prescribed requirements. That has created a condition which has become intolerable because these men have gone on practising chiropractics. It does not in any way curtail or control numerous other irregulars who practise, and

chiropractors are seeking an amendment to the Act, so that they will have in Saskatchewan an examination set by the Senate of the University, and chiropractors are asking for some representation.

In Alberta pretty much the same pertains. There seems to be a difficulty in the universities setting the examination for these various cults. They are usually so far above their heads that nobody applies, and still they carry on practising, and in Alberta there was a special Act, a Drugless or Chiropractor's Act, passed in 1922 or 1923.

To come down to Manitoba. Manitoba is probably a little more drastic.

They say that no man shall practise osteopathy in British Columbia unless he is a fully-fledged practitioner of the College of Physicians and Surgeons. I do not know how they control the chiropractors and the drugless people, therapeutists, and all the rest of the cults. The only Act I have is the Medical Act.

It seems to me, Mr. Chairman, that there is a wide variation in the various provinces. Speaking to Dr. MacDougall from Nova Scotia, he said the best way to do is to ignore them. We tried that in the province of Ontario, which was carried on for years, and things got in a hopeless muddle, and I do feel, particularly if we get a favourable judgment from the Court of Appeal preventing irregulars using the term doctor, physician, or surgeon, and limiting them to treatment of ailments simply by manipulation, as they are supposed to do, that we have gone a very long way in getting some remedy at least to the condition of affairs at the present time.

I know that a great many men place no confidence in the use of the term "doctor". Take those groups in British Columbia. They all pass various examinations. It seems to me they have thereby created various standards of medical education. Here is a group of men who can do what they like; a group of osteopaths who can practise obstetrics, gynecology and medical surgery, another group who can do everything but obstetrics and medical surgery, and still another group of drugless therapists who can do practically the same thing. Still, all these men are known to the public and to the profession as doctors. There surely is some point where a line has to be drawn and I hope that representatives from these various provinces will let us know how they are getting along under their various Acts. I may say I have all the Acts here if any of you wish to see them.

The CHAIRMAN: The subject which Dr. Noble has introduced for discussion at this conference is, I think, one of the best illustrations of the value which may accrue from a conference such as that which is now convened. Legislation obviously differs very greatly in the several provinces of Canada. Dr. Noble has stressed the point that the principle underlying the legislation in Ontario is one which is worth considering by the medical profession all over this country. I quite agree with him that it offers a solution of our difficulties in Ontario, and we hope it will be very effective. The main point that Dr. Noble has stressed, and which I wish to emphasize, is that legislation in Ontario is now embodied in two distinct Acts; one, the Medical Act, which controls the regular practitioner and which insists upon the qualifications required for a license in the College of Physicians and Surgeons, our Board of Licensure. You will, I think, recognize that to have cleared that Act altogether of any reference to osteopaths and other irregular practitioners is a tremendous gain. Under the Medical Act the licensing body has nothing to do but to look after the regular practitioner. But we also recognize that a certain section of the public, demands the right to be treated by irregular practitioners, and we have covered that situation by a separate Act. The activities of these irregulars is thereby brought under the control of a Board of Regents, appointed by the Lieutenant-Governor in Council. We, as a medical profession, are satisfied with that. Under this legislation these irregulars cannot practise surgery, obstetrics or

gynecology; they can not use drugs either internally or externally. By all these means—and this is really the most important point—we believe that the health of the public is safeguarded so far as the irregular practitioner is concerned in the province of Ontario. I think it needs to be more and more emphasized that the primary reason, we as a profession apply for medical legislation to thus control the practitioners of medicine in this country, is not that of selfishly protecting the profession, but that it is in the interest of public health. I know that these Acts, which have been introduced comparatively recently in the province of Ontario, have attracted a great deal of attention not only in Canada but in the United States, and again and again it has been said to me, "I believe you have found a solution of a very difficult problem." I would like to ask the representatives of the other provinces here to discuss this paper which, I think, is one of the most important brought before the conference.

Dr. A. McG. Young: With regard to Saskatchewan, we have this difficulty. There is a Drugless Practitioners' Act with nobody enforcing it, and we do not want to do it. We have asked various bodies to do it but no person does it, and I am interested to know just how other provinces are getting on and how they tackle it. I understand the province of British Columbia has spent a great deal of money in combatting the drugless practitioners. In my humble opinion, the more you prosecute the more you advertise them.

Mr. Chairman: We would like to hear from British Columbia.

Dr. Murphy: This is not a subject I am particularly proud to discuss. We have spent a lot of money in combatting the Chiropractors' Act. It cheers me up to find that things are just about as bad in Saskatchewan. The organized medical profession conducted an extensive and expensive campaign in the House at the time when the chiropractors were seeking license. The Act, which Dr. Noble has described as unsatisfactory, was passed, but it has not changed the situation in any way, shape or form. The situation is exactly the same as that described by Dr. Young. No chiropractor has taken the examination since it was established. No chiropractor has been stopped practising because of the Act. The Act itself is not conformed to and the whole field is wide open to any irregular who wants to come into our province.

The only healing body that I know of that is carefully examined, that is in some way guaranteed to the public, is the medical profession. I am not a member of the executive of the British Columbia College of Physicians and Surgeons, but there are many of us who feel that with legislation of that kind on our Statute books, without any of this Act being enforced, we particularly want, require and hope for some standardization of medical legislation throughout Canada and one central Act unifying the profession and, as our chairman has said, protecting the public on these vital points.

Dr. MacCallum (Toronto): I am against the government; I am against the public. I am for myself and the chiropractors and osteopaths. What is legislation? Our lawyer friends tell us it is crystallized public opinion; that's bunk. You say that the thing to do is to make the public understand that we are working to protect them. The public say that's bunk. Why protect the public? The public does not want to be protected. The public knows enough to protect itself, or thinks it does—and besides, it is its own funeral. You have to put yourself in the place of the legislators. The legislators think that every man has the right to practise medicine. You might say that's bunk, but it isn't bunk; anybody and everybody has the right to practise medicine. The joker is that he has not the right to practise it for gain; that is the kernel of the matter. I am sorry that my friend Dr. Noble attacks the scholastic attainments of the chiropractors. He knows as well as I do the severity of the questions given by the Board of Regents. He also knows some of the answers.

One man's definition of pyelitis was that it was an inflammation of the piles. You seem to be somewhat amused. To me that shows that he was an educated man—that he was able to think. (Laughter.) A definition of the word cystitis was that it was an inflammation of the cyst. Now what's wrong with that? You ask, what are we going to do? Personally, I feel that art is long and life is short, and that we are not going to solve this question in your lifetime or in mine. All that is possible is to go ahead and do the best we can. At one time in Ontario the College of Physicians and Surgeons was quite willing to take the osteopaths in. Dr. Spankie will bear me out. He will tell you that I tried to get a resolution against it on the minutes. I was beaten by one vote. However, I wasn't beaten. We went to the House and won. The Bill was thrown out. Then we came to Dr. Routley's friends, the Farmers' Government. The Farmers' Government put it over us. They said, "Do you expect us to deny to any person the right to have his children treated as he pleases?" Now, a good many professional men do deny that right, yet that's the way the public looks at it. I think the great thing that we have attained in Ontario is that we have segregated these gentlemen. I believe that Quebec so far has had nothing to do with them. Quebec's attitude is that medical laws should deal only with the regular profession. I think that is quite right; it is the feeling I have always had, that we have nothing to do with those outside our own profession. As the result of our Act they were put into a water-tight compartment of their own. The Ontario Act provided a means for the bringing in under it all of the other bodies of irregulars that may arise, and others will arise and have their little day and disappear. I believe that the osteopaths are already beginning to wane. So far as the Chiropractic School at Davenport is concerned, I am told that their numbers have fallen and that they have had to put a mortgage on their institution. I did not lend them the money, however.

You must have irregulars of all sorts. The osteopaths believe that they are in a fair position—having had an education of sorts. I am saying that for the benefit of Quebec. You know how many claims they put forward as to their schools and courses. As regards education they are in Ontario now under a Board of Regents. It is said the Board of Regents had to pretend to do something. I do not believe that. There are osteopaths who are decent osteopaths. I have the pleasure of driving down town quite frequently with an osteopath. Generally he drives a Pierce Arrow—I drive "shanks' mare"—so naturally when he picks me up I regard it as an honour. He probably regards it as a charity. The Board of Regents passed regulations as to entrance, demanding that their men do exactly what we demand of ours—that they pass a junior matriculation. So far there has not been a single one who has taken the junior matriculation. An analysis of the records of the Board of Regents has been made. By the way, I am told the statements were not made under oath—perhaps wisely. At the best, the records show that of the osteopaths who came into Ontario originally, there were very few who had two years of education. There were gentlemen who had nothing but correspondence courses. There were gentlemen who had attended schools. One osteopath has given expression in the public press to his grief and surprise that the College of Physicians will not accept the osteopaths. This man, according to the records of the Board of Regents, had two years of training at osteopathic schools—one of the two years at a school which the regents do not recognize. One can understand his grief but not his surprise. The analysis shows that about forty of these people have taken what they call a three-year course. Of these forty about one-third have graduated from a school of osteopathy in Toronto. Any of you who desire to do so may stop off in Toronto and interview the learned professor of the institution—the professor of anatomy, physiology, chemistry and all the other branches of medicine will perchance snatch a moment from the lecture hours (which the osteopaths

advertise are just the same as for students of medicine in Alberta) to greet you. We have never been able to be in more than one place at one time yet a number of osteopaths have been able to take a course the same months of the year in places far apart. The actual educational acquirements of the osteopathic practitioner are usually quite different from those he states to his patients. In the beginning they cared nothing about educational requirements. We in Ontario have by the Drugless Healers Act been put in the favourable position of knowing what are the actual educational acquirements of those now practising in the province and the requirements for the future.

In answer to Dr. Young—The people who administer the Act in Ontario are the Board of Regents. Now I have held all along—and I have thought over it—the osteopaths and chiropractors should clean up their own stables. God knows we have enough bad ones ourselves. There are decent osteopaths—there are osteopaths who want simply to practise osteopathy. There are decent chiropractors who practise chiropractic only. The chiropractors have stolen the osteopaths' thunder and so are detested by the osteopaths who regard themselves as a higher order, although the chiropractors have in court sworn that they too require matriculation and a four years' course.

It is to be remembered that many of the chiropractors are returned soldiers, victims of the Great War. I hesitate to do anything which may prevent such men from earning a living.

So great is the aversion of the osteopaths to the chiropractors that during the consideration of the Drugless Practitioners Act in Ontario when a conference was suggested between the representatives of the medical profession, the osteopaths and the chiropractors, the osteopaths refused to go into the same room with the chiropractors and abandoned all claim to the occupational designation Doctor when they realized that if the osteopaths were allowed to call themselves Doctor, the chiropractors must also be called Doctor. To be grouped with the chiropractors is to the osteopaths the greatest indignity and so now in Ontario they seek to be taken into the College of Physicians.

Some years ago the Executive of the Ontario Medical Council appointed a committee of which I was one, which met a committee from the osteopaths. We learned a great deal in that meeting. We found their committee about equally divided between those who wished to practise only osteopathy and those who insisted on being allowed to practise both osteopathy and medicine, surgery and midwifery.

The meeting naturally resulted in an impasse. That division exists to-day among the osteopaths. These men came into Ontario to practise manipulations and adjustments. That field proving too narrow they naturally sought to expand it by practising medicine, surgery and midwifery. That they defied the laws regarding the practice of medicine was nothing, provided they could successfully crash the gate. They have not crashed the gate. Their effort is now to mislead the public into believing they have taken the same course as the legally qualified physicians. One osteopath in Ontario has done so and is a member of the College of Physicians and Surgeons.

Now with regard to their being controlled by a Board of Regents. I may say that they are finding among themselves that this Board of Regents has a very difficult position. A comparison of the statements made to us at that meeting with the educational acquirements as shown by the records of the Board of Regents justifies closest scrutiny of any statement made by the osteopaths.

Just as there are uplifters outside, so there are osteopath uplifters. One of these osteopath uplifters said that he would like to have the chance to clean up the mess. He became president of the board but has found that it wasn't so easy to clean up the situation. That is another reason why we should not interfere nor take them into our fold. We cannot possibly clean them up. As

Dr. Murphy told us, more of these men have come in since, and they are going to come in, until they realize, as they do now in Ontario, that they must protect themselves. In Ontario they have taken the first step in their own destruction by demanding junior matriculation to enter and four years of study. They now seek to keep everyone else from practising osteopathy.

I want to say a good word for some of the osteopaths. I am charitable, yes, even sympathetic, to some of these gentlemen. Some of them are men who unfortunately for themselves were not sufficiently educated, or perhaps unable to see their way, or too old to go through the regular course in medicine. It may be that they, just like some of us, have gone into their profession not from any high ideal at all but to make a living, but there are some of them who would like to know more and do better work. Many of the osteopaths are desirous of increasing their knowledge. A large number of them have taken post-graduate courses, but they commenced wrong, and the result is that they have had to keep wrong and seeking further knowledge go to all sorts of inferior institutions—institutions of like calibre with their schools. I do not think you do any good by condemning the osteopaths. I do not propose to slam the osteopath as an individual. I do propose to keep him from getting under the aegis of the College of Physicians and Surgeons.

Mr. CHAIRMAN: The time is getting on and we would like to hear from some other province.

Dr. POOLE (Manitoba): In Manitoba we had this question of the irregular practitioner before our legislature for two or three sessions. The medical profession had a committee of twelve go into the subject and, as in the other provinces, opinion was divided as to the best methods to pursue. Some of the committee suggested legally organizing the irregulars to bring them under government control. Others held that as these men were charlatans, we, as a profession, should not be a party to their recognition. The committee decided that we should oppose any legal standing being given these men and, thus far, as regards Manitoba, they are outside the College of Physicians and Surgeons and outside the law. However, while the irregular has no legal recognition, he continues to flourish and is found in every town of the province.

Dr. W. H. HATTIE (Halifax, N.S.): As you have asked for a statement from each province, perhaps I should say just this for Nova Scotia: What Dr. Noble stated Dr. MacDougall said to him is substantially correct. A number of years ago there was an influx of chiropractors into the province of Nova Scotia and we got quite fussed-up about it. We brought action against the noisest one, who was advertising very extensively; first in the magistrates' Court, then in the County Court. We found that under our Act we could not prove that the chiropractor was practising medicine, so we had the Act amended. In order to get the amendment we desired, we had to consent to taking in four osteopaths who had been in practice in the province for at least five years. This was done more willingly as it admitted a blind man, who has always worked in close association with the regular profession and is highly regarded by them. We knew, as a matter of fact, that two of the others intended to go away because business was bad, so we thought that we were not making a very bad bargain. Having secured these amendments and prepared the regulations which we were authorized to make thereunder, we advertised that arrangements would be made for an examination of all those who wished to qualify under the Act. We had a few enquiries as to what questions these men would be asked. After being informed what would be required of them, they simply closed up shop and went away with the exception of three or four who were not causing very much disturbance. Since that time they have all gone with the exception of one. Two or three cards still remain on the walls of office buildings, but the

gentlemen whose names appear thereon are not in the province. So far as I know, there is but one chiropractor in Nova Scotia at the present time. When we brought action, very strong sentiments were expressed, particularly in some of the newspapers, in opposition to the attitude of the Provincial Medical Board. The medical profession, they said, was a close corporation and this action was not being taken in the interests of the public, but was simply evidence of a selfish attitude on the part of the profession. We found that we were thus giving these men publicity, so we decided that we would rest on our oars for a time. The result is that these men, not getting publicity, for which they did not have to pay, have found that business has become unprofitable and they have left.

Now, Mr. Chairman, one of the matters that is being considered by the Committee on Medical Legislation is the question of the desirability of unifying or standardizing the Provincial Medical Acts. I think I can speak for Nova Scotia when I say that there will be opposition to any interference with the Act we have at the present time. What fault is found in Nova Scotia is not with the Act but rather with the way in which it is administered, and there has not been a very great deal of criticism on that. We are satisfied with the Act. We feel that if we approach our legislature and ask for any material amendments to that Act, there might be a good deal of opposition, and I fancy the same thing would obtain in other provinces. It sems to me that the proper thing to do is to let each province work out its own salvation. It is much easier to get new legislation than it is to get just the amendment you want to existing legislation. Once anything is on the statute books legislators are very chary indeed about making any changes, and my feeling is that, while we should do what we can to develop sentiment in favour of having Acts that are effective in all the provinces, it would be better if no attempt were made to unify or standardize them.

Dr. MacKay (Winnipeg): I am loathe to take up any very valuable time, but this is a question that I believe has several lines to it. If we could simplify legislation and reduce the amount of legislation, we would be accomplishing something. I think every province in Canada is suffering from too much legislation. We have an Act on the Statute Book in the province of Manitoba that, if administered, would have, I should think, a fairly definite effect, but it is not considered politically expedient to handle these things. Why should the onus be placed upon the medical profession, that is the College of Physicians and Surgeons, for the administration of this Act and the financing of any prosecution? That entirely belongs to the Attorney-General's Department. Why does not the Attorney-General enter action against these people? Because it is not considered expedient.

I know for the most part that a great mass of the population believe in osteopathy and other cults. Now this is not confined to the uneducated class. We have some of our most highly educated people having osteopathic treatments and supporting osteopathic treatments; we have a number of men of the professional staff of our own university; we have men on the bench; we have many eminent lawyers. Then we have the uneducated class, who are not nearly as numerous as patients of the osteopaths because as a rule they do not have the necessary wherewithal to pay the osteopaths, who collect at the time, so they come to the regular practitioner because they know they can get off with little, and at most times, with nothing.

In seeking legislation to control these people, I believe we are starting at the wrong end. The medical profession has of late years developed into a more highly scientific body than hitherto. We are carrying out research in all branches. When the crop of the cotton grower of the south is attacked by the boll weevil, when our farmers' crops in the north-

west are attacked by rust-forming spores, or when the apple growers of British Columbia and Nova Scotia are attacked by such pests, what do they do? Just as soon as anything interferes with their commercial prosperity, they immediately rush to their respective governments to ask that a certain amount of money be voted for the purpose of carrying out an investigation as to how to eradicate these pests so as to prevent their attacking their crops. Similarly, it is up to the medical profession to recommend to the Canadian Medical Association that a committee or group of men shall carry out research on this problem to find out why, in the first place, these cults exist, and, secondly, why so many of the public desire to have these people treat them. When they have found out the cause—and we have a fair idea of the effect—the next thing is, how can we best remedy the situation? We have tried legislation, but to my mind legislation is not of value in this connection. We as a profession have to try to find some other means of enlightening the public, to give them a sort of counter-remedy, some definite constructive piece of work to give to the public such as is evidently missing at the present time, whereby we will not be represented as persecutors. It may be mental with the public—I am not sure; but I believe we will go ahead more rapidly if we have a committee of investigation to find out the cause and to suggest a remedy. Then if, after that, legislation is necessary, we can get it.

The Chairman: Before Dr. Mullin speaks, I suggest that Dr. MacKay should add to the work of that research committee, an inquiry as to whether or not these people are rendering service of value to the public and whether it is a menace to the public health. In other words, is it safe? If not, then the question of their removal should be considered.

Dr. J. H. Mullin (Hamilton, Ont.): After listening to this discussion I am rather inclined to agree with Dr. MacCallum that a great deal that has been said is "bunk". I do not think we can hope for anything in legislation until we get public opinion behind us. We were told that by the Hon. Mr. Drury, and I am sure that others who have gone to their legislators have been told the same thing. I do not believe we can get the kind of public opinion that we want until we clean our own house, and provide some standard whereby we can eliminate the irregulars within our own ranks. The average man on the street to-day is quite unable to select intelligently the best doctor in the community in which he lives. We have no standard showing that this man or that man is endeavouring to keep abreast of the times and keep himself qualified. We have no reporting house such as they have in business. To my mind we need such a reporting house, not by means of legislation, but by means of a definite standard whereby the quality of the men in the profession can be indicated. This has been suggested in regard to the specialists, but nothing has yet been brought forward of a constructive nature with regard to the men in general practice.

I would like to ask Dr. Noble if the possibilities of providing this additional standardization has ever been taken up by his board. He knows the personnel of his own board pretty well by now. To what extent are these individually interested in raising the standard of the man in general practice or giving the public some guidance in these matters. The men on his board, to what extent are they personally interested in post-graduate education? I think it would be very fortunate for this country if the profession were divided into two groups—the medico-politicians and the scientific group. If you go across the border, you will see that in their organized bodies in many places this has occurred.

I am not a member of this conference—I am an invited guest, as an observer—and I think other observers will agree that this conference has benefited very considerably by the inclusion of the higher intellectual types, those

from the academic centres, and I know that the executive body, the Council of the Canadian Medical Association, has benefited very considerably by having men from academic centres taking an interest in our business affairs. And I make this appeal, that this conference should urge that men of that group should continue an interest in our business affairs, and in that way assist in maintaining the standard of our organization and possibly eventually they will lead the way in showing us how to provide for this standardization.

Mr. CHAIRMAN: The time is getting on and I must ask the remaining speakers to be brief.

Dr. OWER (Alberta): I would just like to state briefly that osteopaths are examined for license in the same manner as the regular practitioner. They go for examination before a board appointed by the University of Alberta. They are licensed by the College of Physicians and Surgeons. We have five osteopaths in Alberta. Four of those were there when this legislation was brought in. Since the Examining Board was established, we have had about six or seven applications; three of these applicants have been successful. For the last three years there have been no applications from osteopaths.

When the chiropractic legislation was forced upon us, all the chiropractors at that time practising in the province were licensed. A board composed of a chairman, two members of the University Faculty of Medicine, not in practice, and two chiropractors was created, to administer the act. The chairman of the board was Dr. Laidlaw. It worked out that we had to license some twenty chiropractors; there was no way out of it. For two or three years there were no applications for examination, and at that time we thought that the chiropractors themselves did not want any more members of their profession in the province. However it came to the point where we had, I think, five applications. The Chiropractic Board asked the University to create an Examining Board. This Examining Board was formed, submitted examination papers and the chiropractors and ourselves went over the examination questions in detail. The applicants were examined but none were successful. We have not had any applications for two years.

Dr. T. C. ROUTLEY (Toronto): Before this discussion is closed, I would like to add just a few words. I have been much interested in observing medical laws. both in Ontario and Manitoba, and am familiar with the viewpoints now held by the profession in these two provinces. Ontario is of the opinion that probably a legislative fence about the irregulars is going to be ultimately for the public good. Manitoba still expresses doubt about the wisdom of encircling these irregulars by legislative power.

Before closing I should like to make this observation, that the better qualified the medical profession becomes in all the provinces of Canada, the more assiduously do they attempt to guard their own rights, realising that by so doing better health service is assured the public.

Dr. ANDERSON (Wardlow, Alta.): I only want to say a word or two. I wish to correct any misapprehension under which Dr. Noble was labouring and which may have left a wrong impression with you. You have come to the conclusion perhaps that although we have an Act controlling the so-called irregulars, that those who do not conform to the Act could wander at will through the province of Alberta and continue their work. That is not the case. Dr. Ower told you that since the Act was introduced, no chiropractor has been admitted, and in connection with this I wish to say all irregulars are pretty well under control, and we are becoming more satisfied with the working out of this problem in our province. Some one said here to-day that it was unfair to put upon the Council the onus of proof that men were practising irregularly. We recognized that many years ago, and I am pleased to say that in Alberta

we have an Attorney-General's Department which now recognizes this also. It took many years of tact and agitation before we got the Department to see eye to eye with us. Some years ago it was their habit to ask us to secure evidence and prepare the case before they would take action. Now we have a much more satisfactory arrangement.

We now give them such information as we possess and the Attorney-General's Department investigate through the police, gather evidence, and go ahead with the prosecution; so that it does not appear to the public as if we were a close corporation and were trying to preserve our own undue rights in prosecuting these irregulars.

The CHAIRMAN: If there is no further discussion, I will ask Dr. Noble to reply briefly.

Dr. NOBLE: There is a long list of speakers to reply to. I am glad that Dr. Anderson from Alberta spoke as he did. There is that difficulty. As Dr. Routley has said, for the last two months we have been going through all these Acts and trying to sift the wheat from the chaff. It is a very difficult thing to do. The one thing that struck me particularly was that the various provinces do not seem to have any way of controlling these so-called irregulars. Dr. Anderson says that in Alberta the Chiropractic Act is working out satisfactorily. That province must be favourably situated. In Ontario we are continually flooded with irregulars that do not come within that scope at all. I want to congratulate the other provinces; their medical men must be much more easily satisfied than they are in the province of Ontario. Our College of Physicians and Surgeons is simply besieged with requests from practitioners throughout the province as to why the college does not do this or that or something else. It is because of pressure of that kind that something has to be done. I am very glad that in Alberta this Act works out so easily and apparently so satisfactorily. With Dr. Routley, I am sure we would stand behind a general committee or clearing house for all these Acts, because it is very important that we should extract from them a clause here and a clause there in the hope of finally getting an Act which would be satisfactory to every province.

Regarding Dr. Seymour's remarks, we feel the very same in Ontario as he does that the College of Physicians and Surgeons should keep their skirts clear of these irregulars. In the eyes of the public there is no doubt that the profession is looked upon as a close corporation and the minute we start prosecutions, the public right away is apt to say, "There they are again, depriving us of the treatment these people can give us." That is what certain newspapers in Ontario said. That is one thing that we certainly should make clear to the public.

I should like to say, Dr. Mullin, so far as the College of Physicians in Ontario is concerned, we would be absolutely behind the work that is being done in connection with post-graduate studies. Dr. Mullin also spoke of cleaning our own ranks. Are we going to accomplish that by doing as some other provinces have done—admit a whole lot of irregulars into our College of Physicians and Surgeons? I quite appreciate that there are probably some in our ranks that should be disciplined, and that will be disciplined; but, as I say, we are not going to clean our ranks by letting these cults in. By doing so we would soon reach a point of saturation and the medical profession would be so diluted that it would not be very effectual in any particular line.

In connection with Dr. Hattie's remarks, I feel that if these various Acts were gone over probably Nova Scotia would come in with the rest and we would have an Act that would be very satisfactory to the whole Dominion.

In reply to Dr. MacCallum, nobody can really reply to him and I will not try, but I would like to say this. There are 114 osteopaths in the province of

Ontario that have registered with the Board of Regents, and between 600 and 700 chiropractors. Of the 114 osteopaths registered, only five made any claim to junior matriculation. For the others, their preliminary education was not stated.

Dr. Murphy and Dr. Young, the Board of Regents have not yet completed their regulations for the osteopaths. We are particularly well situated in Ontario, because we have one of our brightest regular practitioners as secretary of the board, and Dr. MacKay has done a tremendous amount of work on this board, and, personally, I would like to pay tribute to him. Anyway we try to sift them out and he has sifted them out, I think, very satisfactorily. Some 114 osteopaths and some 600 chiropractors are registered, and these men are very anxious to improve their own cults. Of course the osteopaths chafe terribly at being classed with chiropractors, drugless practitioners, therapeutists, and masseurs. The chiropractors chafe terribly at being classed with drugless practitioners, therapeutists, and masseurs, and so on—all down the line.

I still think, Mr. Chairman, as far as we can see it, that the Ontario Act has kept absolutely to the medical profession our own worries and troubles in the College of Physicians and Surgeons. We can satisfy the public that it has been in the interests only of the public. The so-called drugless practitioners and others will no doubt work out their own destiny and there can be no objection whatever to that. If any of these men register with our Board of Regents, as soon as they attain to a position under which they can fill the requirements of passing the examinations of the College of Physicians and Surgeons, they are welcome to come in, the same as any other. I feel they are much better under the discipline, under the care of the Board of Regents, and no doubt there will be others coming along from time to time. In the meantime they will be properly disciplined.

Dr. MacKay tells us they have had no trouble once they got over the worst part of the work of classifying these men. They are now preparing regulations, and I think it would be a great mistake if these irregulars were admitted into our college. I cannot for the life of me see how they are ever going to get these various cults separated in fairness to the regular practitioner, who has spent five or six years in study, not allowing for post-graduate work. It seems to me a shame that we should have anything whatever to do with these men, and as far as I am concerned, I am going to do all I can that they shall be kept under the Board of Regents.

The CHAIRMAN: We are now to hear from Dr. George S. Young of Toronto who will give us a report of

EXTRA-MURAL POST-GRADUATE MEDICAL EXAMINATION CONDUCTED BY THE CANADIAN MEDICAL ASSOCIATION

Dr. GEORGE S. YOUNG (Toronto): During the last day or so we have heard something about the effort that is being made, and has been made for a good many years, "to make good doctors." This morning I have to make a report dealing with an effort "to make good doctors better." The report will be merely a bare outline of what has been accomplished during the last year or two and is purposely short in order to give time for discussion, a discussion which, I trust, will be helpful to those who are trying to carry on this work and helpful in determining our policy in the future.

At the last Conference of the Medical Services in Canada held here two years ago a paper was read on the subject of Post-Graduate Education. Special attention was given at that time to the system of extra-mural lectures and clinics which had been carried on under the direction of the Ontario Medical Association during the preceding three and a half years. From its inception this movement

had met with a quick response from the doctors throughout the province, and when this conference last met there had already been given about seven hundred and fifty lectures and clinics to groups and societies of practising physicians in almost every nook and corner of Ontario.

The Ontario Medical Association had been so fortunate during the first three years as to receive financial aid. When this came to an end, the association said emphatically that the work must continue, and although it involved an expenditure considerably over $5,000 a year, they proceeded to defray the cost out of their own funds.

Meanwhile the attention of the other provinces had been attracted and the Canadian Medical Association was seriously considering a Dominion-wide scheme of extra-mural lectures and clinics. The cost, however, seemed to be prohibitive. Careful estimates indicated that the plan could not be carried out for less than $30,000 a year, and even the most enthusiastic saw no way to provide for this expenditure. Nevertheless, fresh impetus was given to the project at the last meeting of this conference when a resolution was passed urging that every legitimate effort be made by the Canadian Medical Association to secure funds whereby this post-graduate work, so successfully carried on in Ontario, might be extended to all the provinces in Canada.

In less than six months the question as to where the money was to come from was answered. At the annual meeting of the Canadian Medical Association, the Sun Life Assurance Company of Canada came forward with an offer to provide $30,000 for the purpose of carrying out a program of extra-mural post-graduate work. No "strings" were attached to this grant. The association was simply asked to spend the money to the best advantage in the interests of the highest possible medical service to the public.

At once a central committee was appointed to formulate plans. For Ontario and Quebec, these were comparatively simple, at least from the standpoint of the central committee. The Ontario Medical Association had already learned well how to carry on its own post-graduate work, and so it was given the sum of $2,000 to defray the expenses of its program in outlying districts. The Ontario Medical Association gladly assumed the financial responsibility for post-graduate work within a radius of 250 miles of its central office. As for Quebec, it was decided that French-speaking physicians were in the best position to form their own plans and to work them out to the best advantage. In this province, therefore, the work was placed in the hands of a representative French committee, which, with proverbial courtesy, added to their number the Honorary Treasurer of the Canadian Medical Association and the Dean of the Faculty of Medicine of McGill University.

For the other provinces, and for Newfoundland (the latter being gladly included), all plans were carried out by the central committee. Members of the medical profession, most of them teachers and specialists, were selected for tours throughout the Dominion. They were grouped to form teams, and visiting places were so selected as to minimize travelling expenses. It will be readily understood that all this involved the successful correlation of railway time-tables, routes, meetings, speakers, societies and what not. One distinguished speaker alone cost the committee hours of thought and much correspondence in arranging an itinerary which would fit in with his own plans and meet the requirements of several societies. The central committee wrestled with its problems once a week for the greater part of a year. When an insurmountable difficulty was encountered, the most valuable member of the committee, the Secretary of the Canadian Medical Association, always found a way around it.

And so the first and most difficult year passed, and last fall the committee had the satisfaction of totalling up the results. During the first year of

operation of the National Post-Graduate plan, 513 lectures and clinics were given throughout Canada and Newfoundland by 169 speakers. The total attendance at the meetings and clinics was 17,264. And just here it should be mentioned that this attendance was not restricted to members of the Canadian Medical Association. Incidentally the committee had no difficulty in spending the generous grant of the Sun Life Assurance Company of Canada. Meanwhile, this organization merely looked on with approval and came back with another gift of $30,000 for the second year of operation.

The central committee, on its part, has good reason to expect that this year's operations will be even more successful than the first. Only one radical change of policy has been made. This year an appropriation of $5,000 has been made to the Quebec committee so that they may be able to draw on their own fund instead of through the central committee.

The figures quoted in regard to attendance and speakers may give some idea of the great interest shown by the medical profession, and of the hearty co-operation of the teaching faculties and of specialists throughout the Dominion, but they fail utterly to measure the value of this work to the public. One must turn to the reports of all these lectures and clinics as they have come in both from speakers and societies. It would be impossible to review these many hundred reports in detail but certain features stand out through their frequent repetition. The most interested and enthusiastic listeners seem to have been the general practitioners from the outlying districts. They are the men who, by reason of their isolation, have to face even the most difficult problems in medicine single-handed. It is in such situations that responsibility for a human life is felt to the utmost, and so these men came for instruction and not for entertainment. They came fifty, seventy, one hundred and fifty miles, and more, to attend clinics. One who had practised for many years on the prairies travelled one hundred and eighty miles to attend a meeting, and then asked if he might accompany the speakers to their next stopping place. The interest of the general practitioner was also noted by the speakers themselves in the reports they sent into the central office. For example, one specialist wrote as follows: "I was greatly impressed with the keenness, common sense, general knowledge and unwearying attention. These men are thirsting for information, especially of the practical sort."

Even more significant in these reports is the emphasis repeatedly placed on the advice and help given in difficult and serious cases presented at various clinics. All of us directly engaged in the practice of medicine know how obscure certain illnesses may be, and how often the patient's welfare, and even life may depend on a correct diagnosis. It was in just such cases that the general practitioner and the patient profited; the former, because of the experience gained in one case will help in all similar cases in the future; the latter, because in certain instances noted it meant restoration to health. One need mention only one or two cases recorded in the reports: early tuberculosis of the hip-joint, serious crippling from infective arthritis, obscure tuberculosis kidney—all amenable to the proper treatment. In all educational movements there are certain results which one cannot make any attempt to evaluate. One sees in these reports again and again such words as "stimulus", "interest", enthusiasm"; but none of us can measure the ever-widening influence of these forces. Post-graduate medical education is more or less infectious; it spreads from neighbour to neighbour. It is true, as has been said in regard to another matter during the last few days, that there are some here and there who do not take the disease easily. But there are few indeed who can escape the effects of

post-graduate education if their neighbours catch it. Obviously there are influences in this movement which are bound in time to make for better medical service and better doctors. I believe there is no national movement at present going on in Canada—certainly no national movement conducted by the Canadian Medical Association—that has more in it for the public than this national movement of post-graduate education.

Mr. CHAIRMAN: Is there any discussion?

Dr. L. GERIN-LAJOIE (Montreal): As secretary of the Quebec post-graduate committee may I say that we had an anti-post graduate movement by a certain class of doctors against the Canadian Medical Association last year, but now the feeling has fallen entirely or mostly so. We sent out 45 different lecturers who gave 126 lectures or conferences before 441 rural men of the profession, which is about 45 per cent of the whole rural profession of the province of Quebec. When we were ordered to stop the work by the treasurer, on account of lack of funds, we still had four or five clinical days, as we called them, prepared, but unfortunately we could not deal with them. The general feeling was that the lectures were most interesting and most practical, and whenever we had stopped at one place, it was not long before a demand for a second and third, and even a fourth clinical day, was made. We hope this year, with the experience we have had, that we will have better results than we obtained last year.

Dr. C. D. PARFITT (Gravenhurst, Ont.): I should like to speak as one of those instructed by these extra-mural lectures. The Muskoka Medical Society, during the past three winters, has made an endeavour to take advantage of the opportunity afforded by this group of lecturers through the Ontario Medical and the Canadian Medical Associations. The first year we had an occasional lecture and a year ago we made a serious attempt to have at least one pair of lecturers a month during the six months of the winter. This last year, while we have had fewer, we still keep them going, and hope to continue. They have been of the greatest stimulus to us individually, and most interesting. The meetings have been informal in character, with as many as fourteen to fifteen present, and with an average attendance of twelve or thirteen. Not only have there been informal talks, but informal discussion afterwards. As I say, they have been most stimulating and instructive, and I can assure you that we in Muskoka have appreciated them. I hope very much that many other localities will make a serious effort to arrange for a similar series throughout the winter, for I believe they will be of extreme benefit to the group.

The Ninth District of the Ontario Medical Association has an annual meeting that also has been very stimulating in our fairly large district. We have had a good attendance each year. Then we have also had during the last year or two some meetings of the Muskoka Medical Association. Altogether these extra-mural lectures have been a great success.

The CHAIRMAN: The next paper is one by Dr. Howland on

OCCUPATIONAL THERAPY

Dr. GOLDWIN HOWLAND (Toronto): Occupational Therapy originated as a plan for treating the insane in the year 1771 by Pinel in France, and later we find Turk in England, Rush in Pennsylvania, and Reil in Germany, attempting to hasten the cure of mental cases by providing employment as a therapeutic measure. From this time the pendulum swings forward and backward, as the interest varied with different individuals, the subject including manly agricultural pursuits and household problems.

But at the time of the war Occupational Therapy became an active force for treatment. Particularly was development shown in the United States and

in Canada. In the former country, in 1918, the Government called for one thousand women to volunteer as aides, and in order to train them they started several centres in different parts of the country. Canada, also, in 1918 gave a training course of three months, equal to that of the United States, and sent some four hundred graduates to work as aides in the military hospitals.

With so little scientific training, it is marvelous how much has been accomplished by these aides, not only during the war, but up to the present time, in the various Government hospitals.

With the close of the war a gradual change in the plan of Occupational Therapy has been developed, for much had been learned of its value in different types of cases, and, as a result, it has gradually been changed from a simple plan of giving occupation to sick people, to the place which it will occupy in the future as a scientific method of treatment.

In 1916, the American Society for Occupational Therapy was organized, and in the ten years of its existence, it has developed its organization and the work in practically every state in the Union, and in convention each year discusses the most modern methods and the practical application of the same in different forms of hospital work. The educational side exhibits two standards, some schools giving courses of a few months, similar to the original War training, but, on the other hand, the present development is towards two-year and longer courses, with as complete scientific and occupational training as is possible. There deserve to be mentioned the Boston school, with about thirty graduates a year, and a period of training over two years; the schools at Philadelphia and at St. Louis, and that connected with Milwaukee University.

The scope of the work is most interesting. In New York state, for instance, the development in the mental hospitals has reached such a grade that out of forty-four thousand inmates, fifteen thousand are being treated monthly by Occupational Therapy, and the salary list is over $200,000 a year. Fifteen mental hospitals form this series and some employ over twenty aides. In addition eighteen tuberculosis sanatoria are staffed and equipped with Occupational Therapy and twenty-two other institutions and hospitals—Bellevue Hospital having seventeen aides.

INSTITUTIONS AND HOSPITALS IN NEW YORK STATE USING OCCUPATIONAL THERAPY

—	Average yearly number of patients	Aides
Bedford Sanatorium for Incipient Tuberculosis	150	5
Bellevue Hospital	4,044	17
Bloomingdale Hospital	587	15
Brigham Hall Hospital		1
Craig House Corporation	15 (per day)	2
"Four Winds"	15 (per day)	1
Neurological Institute of N.Y.	15 (per day)	1
Hillbourny Sanitarium	31	1
Home for Incurables	57	2 (part time)
Montefiore Hospital	208	4 (9 student nurses)
Mt. Sinai Hospital	51	1 (2 part time)
Nassau County Sanatorium	40	1
Pine Crest Sanatorium	408	1
Rocky Crest Sanatorium	27 (per month)	1
Rockefeller Institute	178	1
St. Luke's Hospital	50	1 (9 volunteers)
Grasslands Hospital	150 (per month)	3
Yonkers T. B. and Health Assn	29	1
United States V. B. Hospital, Castle Point, N.Y.	144 (per month)	6
United States Naval Hospital, Brooklyn, N.Y.	4,594	7
United States B. B. Hospital, Sunmount, N.Y.		
Industrial Workshops—		
Shop A } Work with Homebound		3
Shop B }		3

LIST OF TUBERCULOSIS HOSPITALS WITH NUMBER OF WORKERS IN EACH INSTITUTION. WORKERS ARE ALL TRAINED

Hospital	Location	Workers
Albany Hospital	Albany, N.Y.	1
Buffalo Municipal Hospital	Buffalo, N.Y.	5
Sunnycrest Sanatorium	Auburn, N.Y.	Part time service
Newton Memorial Hospital	Cassadaga, N.Y.	1
Brook Side Crest Sanatorium	Sherburne, N.Y.	Part time service
Columbia Sanatorium	Philmont, N.Y.	1
Delaware Co. T. B. Hospital	Delhi, N.Y.	Part time service
Jefferson County T. B. Hospital	Watertown, N.Y.	Par time service
Iola Sanatorium	Rochester, N.Y.	1
Nassau County Sanatorium	Hicksville, N.Y.	1
Niagara County Sanatorium	Lockport, N.Y.	1
Onondaga County Sanatorium	Syracuse, N.Y.	1
Oak Mount Sanatorium	Holcomb, N.Y.	1
Oswego County Sanatorium	Richland, N.Y.	1
Pawling Sanatorium	Wynantskill, N.Y.	1
Summit Park Sanatorium	Pomona, N.Y.	1
Homestead Sanatorium	Middle Grove, N.Y.	1
Tompkins County Sanatorium	Taughannock Falls, N.Y.	1

NEW YORK STATE HOSPITALS

—	Chief O.T.	Aides	Physical Instructor	Aides
Binghamton State Hospital	1	8	2	
Brooklyn State Hospital	1	7	1	4
Buffalo State Hospital	1	7		4
Central Islip State Hospital	1	16		4
Harlem Valley State Hospital	1	4		
Hudson River State Hospital	1	13	1	3
Gowanda State Hospital	1	12		3
Kings Park State Hospital	1	27	1	4
Marcy State Hospital	1	6		2
Manhattan State Hospital	1	28	1	3
Middleton State Hospital	1	8		2
Rochester State Hospital	1	4		2
St. Lawrence State Hospital	1	3		2
Utica State Hospital	1	5		2
Willard State Hospital	1	6		3

INSTITUTIONS AND HOSPITALS IN PHILADELPHIA AND VICINITY HAVING OCCUPATIONAL THERAPY

—	Average yearly number of patients	Aides	
Abingdon Hospital	New department	1	
Brown's Farms	160	1	
Chestnut Hill Home for Consumptives	25 (new)	1	
Children's Hospital	720	1	
Eagleville Hospital and Sanatorium	120	1	
Embreeville	346	1	
Friend's Hospital	150	3	
Hahnemann Hospital	100 (new)	1	
Home for Incurables	30	2	(part time)
Ivycroft	300		
Jefferson Hospital	500	1	
Jewish Hospital	500	2	
Orthopedic Hospital	New	1	
Overseas Service Shop	65	2	
Pennsylvania Hospital	1,200	3	
Pennsylvania Hospital for Mental Diseases—			
Men	202	3	
Women	95	5	
Philadelphia Hospital for Mental Diseases	368	3	
Philadelphia Hospital	2,780	6	
Philadelphia Heart Clinic	32	1	
Presbyterian Hospital	1,040	1	
School for Blind, Overbrook	150	2	
United States Naval Hospital	1,357	2	
University Hospital	600	3	
Visiting Nurse Society	82	2	
Visiting Nurse Society—Lansdowne	10	1	
Workship, P.S.O.T	60	1	
Western Community House	25	1	
	10,997	52	

STATE HOSPITALS—PENNSYLVANIA

—	Daily Average patients	Aides
Allentown	250	6
Norristown	125–150	3
Danville	250–300	3
Warren	100	4
Wernersville	70*	
Fairview		
Dixmont	25	
Harrisburg	250	2
Mayview	100	1
Allegheny County (New department)	75	2
Retreat	150	1
Chester County	25	1
Hillside Home	75	1
St. Francis, Pittsburgh	50	2
Mercer Sanatarium	20–25	1
	1,645	27

In the environs of Philadelphia there are fifteen mental hospitals employing about twenty-seven aides, but in the same region there is far greater development in connection with general hospitals and other institutions, since we find twenty-seven hospitals employing from one to six aides, or a total of fifty-two in that vicinity.

Turning again to other states, we find that the work last year was largely connected with surgical cases, so that a composite view of each state in the

Union would show that Occupational Therapy was developing (1) in the mental hospitals; (2) in connection with surgical hospitals; and (3) in the general hospitals themselves.

In 1919, a provincial organization was formed in Ontario, and some attempts have been made to parallel this in the other provinces, but so far, Ontario and Toronto are the nucleus of the work. Aides are already attached to the Toronto General Hospital, St. Michael's, Grace, Western and St. John's, also the Home for Incurables, the Home for the Blind, and many other public institutions. In 1926, the University of Toronto decided to start a two-year course, equal to the best course in the United States, and twenty-five girls are now finishing their first year. The subjects of the first year are: English, French, social service, psychology, anatomy, physiology, muscle physiology, hygiene, and considerable time is allowed to practical art. They will spend most of their summer holidays in clinical work in the hospitals and institutions. In the second year they will take up English or French, abnormal psychology, social service, psychiatry, and other medical subjects, gymnastics and corrective exercises and orthopedics to a limited extent, besides continuing their work in Art and doing clinical work in allied hospitals.

What Occupational Therapy Includes

Occupational Therapy is defined as any activity, mental or physical, definitely prescribed and guided for the specific purpose of contributing to and hastening recovery from disease or injury. It may be divided from three main standpoints: (*a*) Surgical; (*b*) Mental; (*c*) General Occupational.

The surgical side is related to the care of those cases of injury which, after a period of time, fail to recover, or in those cases of deformity, following on such diseases as poliomyelitis. The Workmen's Compensation Board of Ontario have realized the value of this work in advancing the cure of their patients and causing improvement in some who were considered as practically hopeless cases. Watching the men at their work gives the physician of the board a splendid opportunity to actually test their working ability when their course is finished, and also to identify malingerers. They are bringing cases from the far north country to Toronto, until we are able to send trained aides to the northern hospitals.

Let me briefly report the type of cases that showed marked improvement in the last twenty-five treated from the surgeon's report, who was examining the cases for the board: Tendon suture; crushed hand; fractured tibia; brachial plexus injury; colles fracture; fractured elbow; sub-deltoid bursa; and moderately improved fractured elbow, head injury; wrist joint fracture; femur; railroad spine; colles fracture; fractured bones in wrist (two cases). In certain other groups no improvement was shown and they were discharged.

At the same time, besides the actual surgical improvement, there is also a fact of the greatest importance, that the men, instead of sitting idly at home, have their minds occupied by definite work under supervision which, as a result, tends to make them more anxious to return to employment and diminishes neuropathy.

Originally the board sent their patients for three mornings a week, but they are now placing many of them at full time work from nine to five. It is the aide's duty to see that the work given the men is such as will give exercise to the injured part to the best advantage, whether it be by means of hammering brass or cutting by means of saws, or other forms of Occupational device.

The second side of this work is the mental, and we see that the Ontario Government has appointed a chief medical man over all the asylums in the province, and he has already stated that the most important feature of his work was to develop Occupational vocational work in the Ontario institutions.

The plan followed by the American institutions is to send the selected patients into the simplest forms of Occupational shops, promoting them gradually to work which requires greater mental ability, passing into a third group, in which they are first taught the work they will take up when they will leave the hospitals, and finally reaching the advanced vocational group before discharge. It is almost impossible to realize the entire change in the handling of the insane in our asylums which must follow development of this work, and our only fear is that the Government will not realize that aides trained in Canada will not be contented to accept the salaries paid in the Ontario asylums, but will pass over to the American institutions, where they are paid from twice to four times as great.

The third side is that of the general hospital, and one must at once realize that the patients to be treated here will vary in number from time to time. The more chronic surgical and medical cases certainly require this plan of management, and with certain types of cases it is practically impossible to get successful results, unless there is an aide attached to the ward. General hospitals in large cities are bound to have, as time goes on, in addition to the nurses, four other specialized groups of women: the dietician, looking after the food of the patients; the physical aide who gives massage and light treatment; the Social Service aide, whose work is largely outside the hospital, and finally, the Occupational aide who works on the wards and becomes a mediate person between the physician and the patient.

Among the greater group of functional nervous cases that invade every large hospital, it becomes a necessity for the physician in charge of the ward to get the minds of these patients directed from their ailments and bodily conditions as rapidly as possible, and one finds that a successful aide may do this frequently in a very short time. Throughout the country where there are several hospitals in one town, it would be advisable that the Occupational aide should be attached to all three, so that the expenses might be equally divided, and this is probably true for her associates in physical work and Social Service. Where we are dealing with a large city, besides the girls who are attached to the surgical and medical wards in hospitals, to the mental institutions, and also to that very large group of hospitals which supply a home for a long period of time for tuberculosis patients, where Occupational Therapy is an absolute necessity, to these again may be added the refuges for women sent from the courts and to the institutions for the epileptic and paralytic and for the aged, and yet in addition to all these sources for developing the work, there is no doubt that each large city will have to develop a workshop, similar to that established in the city of Toronto, where some 400 patients received 6,000 treatments last year; these cases being sent by the Workmen's Compensation Board, private physicians, and transferred from the out-patient departments of various hospitals. It is evidently necessary that there should be developed a Society of Occupational Therapy for the whole Dominion of Canada parallel to the American organizations, so that the advance that is shown in the province of Ontario may also be equally developed in the other provinces of the Dominion of Canada.

The CHAIRMAN: I think we are all agreed with Dr. Howland concerning the effect of hospital treatment. During the war, for example, we found that such treatment had a deteriorating effect upon the mentality of the patient and upon his outlook on life. We found if we were able to get these people employed, instead of allowing them to be idle, that their mental attitude toward the activities of life was maintained, and that when they were prepared to go out from the hospital they were ready to assume their former duties. On the other hand, in the general hospitals to-day you will find that workmen employed at various industrial occupations have, after a long convalescence, lost all

ambition and have deteriorated mentally, and it takes them a long time to get back to their stride. As proof of that,. I would simply cite the fact that in the city of Toronto, where this association has become most active, our industrial organizations have come to us voluntarily and said, "We are willing to help you financially; it is a good investment for us. Our employees come back to us in better shape as a result of this occupational therapy." So we have what we call bursaries, the contributions to which are utilized for special purposes. How many bursaries have you, Dr. Howland?

Dr. HOWLAND: So far we have had thirty-one paid bursaries either of $100 or $150 each, which have been given to us voluntarily largely through sources of that kind. There are two ways in which we have proved the value of our endeavours; one is that the Workmen's Compensation Board have realized that it is a good financial investment, and secondly, that certain industries have acknowledged that we are doing work that is of great value to them.

The CHAIRMAN: I am quite sure that this question of Occupational Therapy is going to be one of very great importance throughout the whole breadth of Canada. Is there any discussion?

Dr. J. C. MEAKINS (Montreal): I would like to say one word to congratulate Dr. Howland in offering to us this really wonderful report on what they have accomplished in the last few years. It appeals to me from two points. First from the educational point of view of the student, who, I think, fails to appreciate the importance of these factors, and the second—I would like to ask Dr. Howland, from a practical point of view, in putting this into operation in our hospital, if he thinks it is necessary to have a workshop or gymnasium, or such-like equipment, in a general hospital, or if he thinks it could be done altogether in the wards. I am particularly glad this subject came up, because for the last six months I have been seriously considering the ways and means of establishing this treatment and teaching in our own department. Another request is that if I can find the ways and means, would he keep his eye open for good aides, because I would much rather employ home product than go afield for it.

Dr. G. S. YOUNG (Toronto): Is this system of Occupational Therapy carried to the extent of providing mental occupation for people who cannot have physical exercises? I should suppose it would be, because mental occupation for people who cannot physically exert themselves is a tremendous entity in dealing with the sick in bed for long periods of time. I would like to have time to say something about mental occupation which is provided for patients in our own Sanatorium in Nanette, Man. If any of you have an opportunity of going there, you will find that a system is in operation for the patients who are bedridden for a long period. I should just like to ask Dr. Howland if it is provided in the system he is carrying out.

The CHAIRMAN: We are now to have a communication from Dr. Wadge

Dr. HERBERT W. WADGE (Winnipeg): The Manitoba Medical Association requested me to present to this conference two questions in which the medical profession comes into contact with the Federal Government. The first of these has to do with

THE MEDICAL CARE OF INDIANS

The medical care of the Indians of Canada has been more or less systematically undertaken by the Department of Indian Affairs ever since the Government made treaties with them for their lands. The department makes arrangements for this medical care in various ways, according to the conditions of each reserve and province. In many places physicians have been engaged on salary

to attend Indians in one or more reserves; on the other hand, where a physician not on salary is called to make special visits, attend emergency cases or perform operations, he is generally paid according to the ordinary local schedule of medical fees. It is impossible to make a general statement as to how the department pays for medical service to Indians as it has many different methods and arrangements for paying for such service.

In 1925 the Manitoba Medical Association referred to the Canadian Medical Association complaints in regard to payment for medical services to Indians as follows:—

"It has been found that in the case of some of the hospitals the following agreement exists with the Department of Indian Affairs:—

"That indigent Indians are cared for in the public wards, and receive not only hospital care, including nursing, etc., but also medical or surgical attention in return for payment at the rate of $1.75 per diem for Indians resident in Manitoba, and at the rate of $2.50 per diem for Indians outside of that province."

"This arrangement exists in large cities, but in towns the attending physician is paid in addition to the hospital. It should be noted in regard to the above that no provision is made for the payment of medical or surgical fees. The hospitals are retailing the services of the profession and in this manner subsidizing the Dominion Government. To the best of our knowledge, no other business or profession has been placed in a like position."

Following the Convention of that year the Executive Committee of the association formed a committee to make investigation. This committee received hearty co-operation from the representatives of six of the provincial associations and made an extensive investigation in those provinces: British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, and Nova Scotia. From its report to the Council of the Canadian Medical Association in June last, the following extracts may be quoted, the first of which is a letter from the Department of Indian Affairs to one of the members of the committee.

OTTAWA, December 22, 1925.

1.

"SIR,—I beg to say that Dr. W—, of M—B—, has forwarded to the department your letter to him of the 17th instant, as he is not in a position to answer all the questions asked therein.

"For your information I beg to state as follows:—

"1. When destitute Indians are sent to a hospital under authority of the Indian agent, or other officer of the department, payment for maintenance and care, etc., at public ward rates is made by the department on receipt of accounts in detail, certified as correct by the Indian agent.

"2. The rates paid vary, but only public ward charges are allowed.

"3. In hospitals operated in the larger cities, arrangements exist whereby payment by the department of public ward charges covers not only hospital care, but also the services of the physician or surgeon who takes charge of the case.

"4. If the hospital is small and has not a staff of physicians or surgeons attending on the wards, the physician or surgeon who takes charge of the Indian case is allowed a reasonable fee.

"I may add that the funds at the department's disposal wherewith to pay for medical and surgical services and also for medicines are exceedingly limited, and, as accounts are received from all parts of the Dominion the strictest economy has to be observed in making payment. Moreover, I may say that, when an Indian who is in funds becomes ill, the attending physician or surgeon should collect his fee from the Indian instead of looking to the department for payment. As above stated, the department makes payment on behalf of destitute Indians only.

"Your obedient servant,

"(Signed) J. D. McLEAN,
"*Assistant Deputy and Secretary.*

"WARD WOOLNER, Esq., M.D.,
"Ayr, Ontario.

"2. This letter is very clear and gives a very definite expression of the policy of the department. It shows that they take advantage of public ward rates in the larger hospitals of the cities to obtain medical and surgical service free and hospital service at less than cost for the Indian patients.

"3. In surveying the reports from the provinces represented it would appear that the policy of the Department of Indian Affairs as to the medical care of their Indian wards

is to secure medical, surgical and hospital service for such of their wards as require hospital treatment at as low a rate as possible in each locality, irrespective of what they pay elsewhere. In so doing they thus demand free treatment from medical men in many cities who are doing public ward work. At the same time, though the Government is well able to pay for proper care for their wards, the department in thus placing their Indian patients in the public wards of the hospitals are exacting treatment and care for these patients at a marked financial loss to these institutions.

"4. On further consideration it is shown that the hospitals of the larger cities actually bargain to supply medical and surgical service for these patients, though the physicians and surgeons have not been consulted in the matter."

Since making that report last summer, the central committee in Winnipeg have been further investigating the local situation. They found that the great majority of the Indians requiring hospital treatment, in fact over 95 per cent, were sent to St. Boniface Hospital and that a few from time to time were received at the Winnipeg General Hospital. In 1919, and before, these patients had been taken care of in the public wards of these hospitals at public ward rates, but in St. Boniface Hospital they had been attended by a physician, Dr. O. I. Grain, appointed and paid by the Department of Indian Affairs. Early in 1921, St. Boniface Hospital notified Mr. Bunne, the local Inspector of Indian Agencies, that their cost per patient per day in 1920 was $2.94. They also stated that the Department of Militia had increased its allowance for their patients to $2.25 per day, plus extras, that is for X-rays, serums, liquors, expensive drugs, etc., with a fixed rate of $5 for major and minor operations, and a fixed charge of $2 for laboratory work as required. In view of these conditions they asked that the Department of Indian Affairs increase its rates of pay for Indians to the same extent as the Department of Militia had done. It appears that shortly after this the Department agreed to do so, and that St. Boniface Hospital received these rates of pay until late in 1923, while at the same time the Department of Indian Affairs paid Dr. J. A. MacArthur for attending these Indian patients. Dr. MacArthur was permitted to call a specialist for extra service when required and such specialist also was paid by the department. Then we found that in August, 1923, the department evidently wrote to the Winnipeg General Hospital as to the costs for Indian patients in their wards; for on the 10th instant the hospital replied that, as in the past, it was prepared to accept Indians on a statutory rate of $1.75 per day for those resident in the province of Manitoba, and $2.50 per day for those resident outside the province and that under these conditions no charge would be made for medical attention or specialists' fees. Judging from the information obtained it would seem that this financial arrangement was almost immediately brought to the attention of St. Boniface Hospital for, on the 28th of August, St. Boniface Hospital wrote to Mr. Bunne to confirm a conversation of the day before in which they agreed to accept Indian patients at $1.75 per day for those residing in Manitoba and $2.25 per day for those of the other provinces. Apparently the directors of St. Boniface Hospital were under the impression that they had to meet the rates and conditions as quoted by the Winnipeg General Hospital for they say further in their letter, "If the change in question is due to the expense of a medical attendant our hospital is now equipped with an efficient and long practising staff of doctors who give their services to the public ward patients free." Then, a few weeks later, on October 4, the department wrote to St. Boniface Hospital giving details of the new agreement as mentioned in the letter to Mr. Bunne and on the same date Dr. MacArthur was notified of the new arrangement. So we find that at about this time in these two hospitals all Indian patients were henceforth to be treated in the public wards of the hospitals without any payment being made for medical or surgical service. For some time the medical staff of the St. Boniface Hospital did not realize what was being done but they soon began to make

enquiries and found that these patients were not indigent patients in the ordinary sense of the term, but were really wards of the Government. This is why the Manitoba Medical Association has taken up the matter.

The Indian patients are practically all sent to St. Boniface Hospital and its annex, St. Roch's Hospital, for Infective Diseases. For example, last year, 1926, only one Indian patient was sent by the department to the Winnipeg General Hospital, while eighty-two were sent to St. Boniface and St. Roch's Hospitals, and during the year these Indians received 2,350 days' hospital treatment.

Is the Federal Government responsible for the care of its wards? We can fairly claim that it is, and we may also fairly claim that it acknowledges this responsibility by its care of certain classes of wards. For example, we all know well that in the recent great war the Federal Government made excellent arrangements regardless of cost for the proper medical and surgical care of sick and wounded soldiers as well as sanitary arrangements for the general health of the army. And also at the present time it is caring for hundreds and thousands of ex-soldiers whose present illnesses and disabilities are due to war service. And again, as another example, we all know that the Government provides all necessary medical and surgical care for the criminals in our penitentiaries.

Are the Indians wards of the Government? According to the Indian Act, section 102, we find that " no person shall take any security or otherwise obtain any lien or charge . . . upon real or personal property of any Indian or non-treaty Indian." And further, according to section 164 of this Act, we find that " no Indian or non-treaty Indian resident in the province of Manitoba, Saskatchewan, Alberta, or the Territories, shall be held capable of having acquired or of acquiring a homestead or pre-emption right under any Act respecting Dominion lands." These two classes in themselves are sufficient to show that the Indian is a minor in the eyes of the law and thus a ward of the Government. That they are wards is attested also by the provisions of section 92 of the same Act, where the Superintendent General of the Indian Department is given power to (subsection "*e*") " furnish sufficient aid from the funds of the band for the relief of sick, disabled, aged or destitute Indians." That is to say, he can use trust funds of the band of Indians for the purpose of relief. Further (subsection " *e* ") he is empowered to supply " such medical aid, medicine and other articles of accommodation " as he may deem necessary for the prevention and mitigation of disease amongst the Indians.

Again we find that the Superintendent General does actually provide " Medical aid, medicine and other articles of accommodation for Indians. Let us quote one item only of the Auditor General's report 1924-25, Part " I ", Indian Affairs Department. For example, on page 14 of this report, under the heading " Birtle Agency, Manitoba," an expenditure of $17,488.53 is accounted for under seven different headings, two of which are as follows:—

Supplies for destitute: blankets and clothing, $122.34; provisions and supplies, $832.21; relief, $495; sundries, $133.38.....	$1,582 93
Hospitals, medical attendance, medicines, etc.: field matron, Mrs. A. Mathews, $180; drugs, $339.34; hospitals, $1,494.75; medical attendance, $1,162.15; sundries, $25.65.....	$3,201 89

So here we see that the actual expenditure of money in Indian agencies for relief and for medical service for Indians demonstrates also that as an actuality the Indians are wards of the Federal Government.

What then can we say as to the responsibility of the Federal Government for the Indians? In the light of these quotations from the Indian Act and the Auditor General's Report, we must consider the Federal Government is as fully cognizant of its responsibility for the medical care of the Indians as it is for

the medical care of other wards such as soldiers, certain classes of ex-soldiers, prisoners, etc. And, further, being thus responsible for their care, we must consider they are also responsible for the payment of same. Now, the Government has no hesitation in making arrangements for the hospital care and maintenance of Indians who are their wards, and in doing so they acknowledge their responsibility for these Indians. If they pay for the hospital maintenance and care, and if they pay for certain medical services on salary, why not pay for all medical and surgical services provided for Indians? They do pay this in small hospitals and towns where there are no public ward rates, and in doing so acknowledge the principle of payment for non-salaried medical service. Why then should the medical men in larger cities be discriminated against and not also be paid for their services to the Indians?

In looking over the reports on the medical care of Indians, it would appear that the actual policy of the Department of Indian Affairs is to obtain such service for their Indian wards as cheaply as possible, regardless of the fairness of their method. The amounts paid vary greatly from place to place and there is no one principle established as to regular rates of pay for such service, not even in any one province so far as we have had replies. Their present system appears to be a relic of the old feudal system of government, " Might is Right ", or in modern parlance, " When in power get all you can without paying for it." Can we, as a profession, permit ourselves to be longer dominated by these principles?

Our profession has long given abundant service gratuitously to those in need of the same, but it is being imposed upon and exploited when individuals or groups who are able to provide easily for the necessities of life obtain such service free. When our Government can provide millions of dollars for the development of harbours, when it can provide, as it has done, twenty, thirty or forty million dollars per year for deficits in the National Railway, when it can pay thirty million dollars per year on the national debt and at the same time reduce taxation to the extent of another twenty million dollars per year, when to the legal profession it can pay huge sums for services, as, for example, $200 per day to the chief counsel, and $100 per day to the assistant counsel, in the present Customs Inquiry Commission; then it cannot be said that it is unable to pay for equivalent services in the proper medical and surgical care of its Indian wards. The Indian Department does not cost the Government more than four million dollars per year, and there is no just reason why the yearly estimates of the department should not be sufficiently increased to provide for proper payment for medical and surgical service as well as hospital care for all Indians requiring it. All wards of the Government should have their medical and surgical care paid for as well as their hospital maintenance.

What shall we say of the hospitals that bargain with the Government to sell our services to them without our permission, or even our knowledge? Possibly the boards of directors in doing so did not realize exactly what they were doing, but the principle is wrong. No hospital should have the privilege or the power of making bargains with any government or any organization for patients to be entered into public wards for free treatment without the full knowledge and sanction of the medical men of the province in which such hospital is located. It is time that the whole question of the relations of the medical profession to the boards of directors of the hospitals be thoroughly reviewed and revised.

What we need in the medical profession of Canada is more " class consciousness," such as will consider the needs and welfare of the whole profession. This phrase might sound somewhat socialistic; however, socialistic or not, that is what we need. The medical profession in Great Britain has developed " class consciousness " to a great extent. They found they had to do so to protect

their interests. Nothing did so much to effect this in Britain as the National Insurance Act. No doubt the most of you remember the visit to Canada in May, 1925, of the late Mr. Basil Hall, who was at that time President of the British Medical Association. In Winnipeg he told us that after the war the association wished to revise their schedule of fees in reference to the National Insurance Panel. The British Government was disposed to ignore the association entirely, as it considered it would be able to set whatever fee it wished and secure all the medical practitioners it required. The British Association spread this information to all their members and to all the practitioners in the British Isles, with the result that in a very short period over 90 per cent of the physicians of Great Britain had become members of the association. Then when the Government asked for applications for panel positions it soon found it was not able to secure sufficient men to fill the positions on the panel, at the Government terms. Consequently it was forced to appeal to the British Medical Association and accept its sugggestion of a board of arbitration on the question of the panel fees to be paid. Take another example related to us by Mr. Basil Hall. Recently, when the city of Manchester advertised for applications for the position of chief medical officer of health, they offered a salary of £1,500, but the British Medical Association advised all its members that it considered the position was worth £2,000. As a result the Manchester Council received no applications for the position, and finally it had to engage a physician for the position at a salary of £2,000. These examples show to some extent how "class consciousness" has entered into the life of the British physician. Until our medical leaders can show that they are looking after the interests of the everyday physician as well as their own private interests, then it cannot be said that they are a brilliant success.

Now the profession in Manitoba are, through their voluntary organizations, seeking to secure a just arrangement of remuneration for medical services to Indians. They have progressed to the extent that they have persuaded the Winnipeg General Hospital and St. Boniface Hospital to cancel their former agreements with the Department of Indian Affairs. Herewith are quoted extracts from copies of letters sent to us. First, from the Winnipeg General Hospital:—

"February 4, 1927.

"We have this day written to the Secretary, Department of Indian Affairs, advising that this hospital is no longer prepared to accept Indians, who come under the jurisdiction of the Department of Indian Affairs, at public ward rates."

Second, from St. Boniface Hospital to the Department of Indian Affairs:—

"March 11, 1927.

"Our agreement with your department concerning Indian affairs has caused considerable dissatisfaction amongst the medical profession in this district, so that we can no longer request the services of our staff doctors for Indian patients until some satisfactory arrangements be made between your department and the doctors, this to take effect on June 1."

So it will be seen that we are now prepared to discuss this matter with the department, and we are prepared to proceed forthwith to make an agreement more in consonance with fairplay and justice than has obtained in the past.

In this conference we ought, to my mind, to immediately define our position as being absolutely opposed to Indians receiving free treatment in the public wards of our hospitals or elsewhere, for the reason that they are wards of the Government. Further we should appoint a committee to interview the Department of Indian Affairs, and if necessary the Dominion Cabinet to ask an early revision of their policy in this matter. And in this connection, it might be suggested that the whole problem of medical service to Indians, including

the amounts of salaries to medical officers of reserves, be also reviewed and revised as many of these officers have expressed the opinion that the salaries paid were too low.

Next we should notify, through the medium of the Canadian Medical Association, all provincial medical associations of our stand in this matter, and ask them to forward this information to all the medical associations or societies affiliated with them, and all hospitals and hospital staffs in their respective provinces. And lastly, as a corollary to this question we should appoint a committee to take up immediately the matter of the relations of the medical profession to the boards of directors of our hospitals dealing primarily with the question of the extent to which a medical man on the staff for public ward patients is expected to give free treatment.

Resolution

Whereas, both treaty and non-treaty Indians are wards of the Federal Government;

And whereas, the Department of Indian Affairs has stated that: "In hospitals of the larger cities arrangements exist whereby payment by the department of public ward charges covers not only hospital care, but also the services of the physician or surgeon who takes charge of the case";

Therefore be it resolved: That this Conference on the Medical Services in Canada does hereby declare that it is opposed to the principle of the free treatment of Indians in our hospitals by the members of the staffs of the said hospitals; and further,

That the Executive Committee of the Canadian Medical Association be asked to take up with the Department of Indian Affairs, at an early date, the question of fair remuneration for all medical and surgical work done for Indians in any ward of our hospitals.

The Chairman: I regret very much that time will not permit the discussion of this important paper, as I am sure there are many members here who would like to take part therein. It not only deals with matters of peculiar interest to ourselves, but covers a great many points with regard to the administration of hospitals and the work among Indians generally. The paper will be put on the record and I have no doubt that Dr. Wadge, who is Chairman of the Committee on Indian Affairs, will see that it is fully considered by the Canadian Medical Association.

Dr. Wadge: If there is time this afternoon it might be brought up then.

Dr. Poole (Chairman, Resolutions Committee): The first resolution the Resolutions Committee wishes to present to this conference is as follows:—

"That this Conference of the Medical Services in Canada recommends that the feasibility of holding a Conjoint Examination between the Medical Council of Canada, the Provincial Medical Councils or Boards and the Canadian universities be given consideration by each of the bodies concerned.

"That a copy of this resolution and a copy of the following proposed method of conducting a Conjoint Examination be forwarded to each of the bodies concerned."

The following is a proposed method of conducting a Conjoint Examination:

" A Provincial Medical Council or Board or a Canadian university desirous of taking part in a Conjoint Examination with the Medical Council of Canada shall make application to this body some months before the meeting of the Medical Council of Canada at which the Board of Examiners is appointed.

" The Medical Council of Canada, having approved of the application, shall request the Provincial Medical Council (or Board), or the university, to submit nominations for examiners in each of the subjects of its examination.

" The Medical Council of Canada shall appoint the Board of Examiners for the Conjoint Examination, selecting a certain portion of the board from the nominations of the provincial board and a certain portion from the nominations of the university.

" The conduct of the examination shall be carried out by co-operation between the Registrar of the Medical Council of Canada, the Registrar of the Provincial Medical Council concerned and the Registrar of the Faculty of Medicine of the University concerned.

" The results of this Conjoint Examination as determined by the Board of Examiners shall be forwarded to each of the participating bodies.

" The university concerned, after passing upon their candidates, shall forward the names of the successful candidates upon whom their degree will be conferred to the Provincial Medical Council or Board and to the Medical Council of Canada.

" The Provincial Medical Council or Board concerned, after passing upon the successful university candidates, shall forward the names of those approved by their Council or Board to the Registrar of the Medical Council of Canada.

" The Medical Council of Canada shall consider the results of the Conjoint Examining Board and the names of those candidates which have been approved by the Provincial Medical Council or Board and of those who have received their university degree and shall confer upon the successful candidates the licentiate of the Medical Council of Canada."

I move the adoption of this resolution.

The CHAIRMAN: The report of the Resolutions Committee is that this resolution be adopted. I would like to state that the form which it has taken commits us to nothing except that the scheme be referred to the different institutions concerned for their consideration, and report to the Secretary of the Canadian Medical Association. I think it would be wise, Dr. Poole, to put that in your resolution.

Dr. POOLE: We will do that.

The CHAIRMAN: In other words, this is a scheme which requires the most careful consideration—much more in detail than has been possible by the committee in the last few days. It is merely in order to get this matter before the different bodies concerned that this resolution is placed before you for consideration.

(See Appendix for all Resolutions).

WEDNESDAY AFTERNOON SITTING

The conference resumed, Dr. Primrose in the chair.

The CHAIRMAN: We are now to have a report by Dr. MacMurchy on the

MATERNAL MORTALITY SURVEY

Dr. HELEN MACMURCHY (Child Welfare Division, Department of Health, Canada):

The first word must be a word of thanks to the honourable minister, the deputy and assistant deputy, to over 2,000 members of the medical profession, the provincial authorities, the Dominion Bureau of Statistics, the Natural Resources Intelligence Branch, and all others who have co-operated in this enquiry, including the staff of the Division of Child Welfare, who have assisted in the necessary work with interest and accuracy.

Two years and three months ago, at the First Conference on the Medical Services in Canada, December 20, 1924, the following resolution was passed: " Resolved that the Federal Department of Health be requested to undertake a Comprehensive Enquiry in regard to Maternal Mortality in Canada."

The enquiry, which was put in hand at once, under the direction of the deputy minister, has passed through five stages.

First. Preparation of Forms. Letters of Advice.

In January and February, 1925, about sixty members of the profession, including several university professors of obstetrics and others who had shown themselves interested in the subject, were consulted, and the necessary forms were prepared and approved by the deputy minister, the members of the Dominion Council of Health and the provincial health authorities in March and April.

On May 29, 1925, a letter was sent to every legally qualified medical practitioner in Canada, about 8,000 in number, enclosing a copy of the resolution and asking for their advice and help in the enquiry. Six hundred and forty-one letters of advice were received. These letters contained many valuable suggestions as to the prevention of maternal mortality.

Second. Statistics.

It was decided that the necessary statistics should be collected for one year, the 59th year of Confederation, from Dominion Day, 1925, to Dominion Day, 1926, and that a study should be made of certain facts as recorded upon the Certificate of Death of every woman, from 15 to 50 years of age inclusive, who died in that year. This information was available from the Provincial Registrar-General only in each province, and in May and June, 1925, requests were made to all these provincial authorities and to the Dominion Bureau of Statistics for co-operation.

Third. Issue of Form 1. Replies Received.

Form 1 had already been prepared for recording these facts and submitted to the Registrar-General of each province. In addition, the form gave the name of the province and the name and address of the legally qualified medical practitioner or other person signing the Certificate of Death. A supply of Form 1 was sent to each Provincial Registrar-General on July 1, 1925.

The first completed forms were received on August 3, 1925, from the province of New Brunswick, and soon thereafter from the other provinces. About 11,000 completed copies of Form 1 were received in all from that date until March 9, 1927, when the last reply was received, over a year after the date of the death therein recorded.

Fourth. Classifying Form 1 and Issuing Form 2.

The next stage was to divide the forms on receipts into three classes.

First Class: Those which belong to the Enquiry—which numbered 1,202.

Second Class: Those which did not belong to the Enquiry—which numbered about 6,998.

Third Class: Those which might or might not belong to the Enquiry as the cause of death stated was: Haemorrhage, septicaemia, tuberculosis, cardiac disease, influenza, pneumonia, embolus, etc.—which numbered about 2,800.

A copy of White Form 2, which was an outline for a brief medical history of the case, was mailed to the address given in each Form 1 placed in the First Class, along with a letter of explanation requesting that the inclosed form 2 be filled out and returned.

The forms in the Second Class were laid aside and no further action taken.

A Red Form 2 was mailed to the address given in each Form 1 placed in the Third Class, along with a letter of explanation and request as above.

The Red Form differed from the White in the addition of one question: "Was the deceased pregnant at any time during the year preceding her death?" If this question or the next—"Had the pregnancy any influence whatever on the fatality?"—was answered in the negative, then these cards, having nothing to do with the Enquiry, were put into the Second Class.

If both questions were answered affirmatively, the Red Form was put into the First Class.

Three hundred and thirty Red Forms, or 28 per cent of the 1,202 maternal deaths reported as such, were placed in the First Class. Total 1,532.

It will be remembered that in a similar Enquiry into maternal mortality in Ontario in 1921 and 1922 by Dr. W. J. Bell, the correspondent numbers in 1921 were 96 added to 387 maternal deaths, and in 1922, 95 added to 370 maternal deaths, an increase of about 25 per cent.

The first issue of Form 2 was on September 25, and the first answer was received on September 30. In many cases the letter was answered by the doctor on the day of receipt.

All completed Forms were filed alphabetically under the name of the province.

Fifth. Tabulating the Results.

The total number of Form 2 issued to which no answer was received was 131, or 8.55 per cent of the total. In other words, nearly 92 per cent of the physicians who signed the Certificate of Death assisted in the Enquiry by forwarding a brief medical history as requested and giving certain additional information. Many did much more than this. For example, one doctor tabulated the last 200 maternity cases he had attended previous to the Enquiry, giving certain important particulars as to their nursing and post partum care.

The number of maternal deaths shown as such in the 59th year of Confederation was 1,202, including 151 abortions.[1] This corresponds closely but not exactly with the figures of the Dominion Bureau of Statistics. Adding to 1,202 the 330[2] maternal deaths reported on Red Forms, we have a total of 1,532

[1] Abortion is the expulsion of the ovum from the uterus at a period before the foetus has become viable.—Eden & Holland, 6th Edition, p. 187.

[2] Forty of these were abortions.

51081—10½

maternal deaths in that year or over four maternal deaths per day. This is a rate of approximately 6.4 per 1,000 living births.

On the other hand we have received reports from physicians who have attended respectively 2,196 and 2,300 cases without a single maternal death and of four others who have had respectively no maternal death in 10 years, one maternal death in 33 years, one in 35 years, and one in 37 years. One doctor reported 2 deaths in 7,000 cases.

Although nearly 92 per cent of the returns were filled out, full information is not always given. For example, in regard to whether the birth was at full term or not, only 1,321 replies were received, and in regard to whether it was a living birth or not, only 1,316 replies were received. This accounts for the fact that some of the percentages given below are not as high as they otherwise would be.

Results of the Enquiry

Pre-Natal Care.

One thousand three hundred and two of the 1,532 mothers who died in that year did not have pre-natal care. Pre-natal care was given in 230 cases only, about 15 per cent. This care was given in 228 cases by the physician, 39 cases by a nurse, and in 16 cases at a clinic, centre or hospital.

There is no difference of opinion as to the importance of pre-natal care as the most effective means of lessening maternal mortality, and maternal morbidity, which Sir Frederick Truby King says is ten times as great as maternal mortality. Fifty of our letters of advice from physicians mention the importance of educating mothers to the meaning and duty of pre-natal care. One doctor reports that out of a total of 136 births attended by him in 1924, he was not notified until labour had actually begun in 45 cases, or one case out of three.

"It has long been recognized that most of the complications arising in pregnancy, in labour, and after labour are preventable. If they are detected early they can easily be cured. In the case of most of them it is only when they have progressed, unrecognized and untreated, that they are dangerous."—(Professor B. P. Watson.)

Advantages of Pre-Natal Care.

Toxaemia can be controlled or avoided and Eclampsia almost eliminated by early recognition and appropriate treatment. Malpositions may be corrected, even the possibility of hæmorrhage may be foreseen and plans made to meet the danger. Manipulations and injuries which might have been avoided are necessary on account of the delay, and these manipulations and injuries may cause death directly or indirectly.

In answer to the question: "By what means might this death have been prevented?" the answer "By pre-natal care" was given 276 times.

It is stated in 40 cases that the patient herself was responsible for the failure of pre-natal care, either because the directions of the physician were not carried out or that the necessary care was interrupted, being given for one or two months and then omitted entirely.

Total number of cases in this Enquiry where it is indicated that adequate pre-natal care would have prevented the death of the mother—316.

Not one of the mothers who attended the Centres of the London Child Welfare Association, London, Ont., and received pre-natal care from the nurses there under the direction of their own family physicians died in 1926.

A pre-natal care demonstration is now going on in Tioga county, N.Y. In 1926 the number of patients was 253. Of this number, 133 were reported by physicians, 116 by laymen, and 4 by social workers. There were no maternal deaths in either 1925 or 1926.

Why is it that the majority of our mothers neither ask for nor receive pre-natal care?

Because the mother does not understand.

Here is a letter from one of our French colleagues which expresses this clearly:—

"Je suis médecin de campagne. Il est bien triste de le dire, mais nous voyons toujours les femmes juste au moment de l'accouchement. Les femmes ne veulent pas se faire examiner avant cette date. Pas d'analyse d'urine; rien de tout cela. Voila le grand mal."

(*Translation*)

"I am a country doctor. It is sad to say, but we see the women only at the time of birth. They do not want to be examined before that date. No urinalysis: nothing at all like that. This is the great trouble."

In another letter this doctor says:—

"We are unable to make these poor mothers understand that they need pre-natal care."

The economic factor comes into this question. It is not unusual for us to receive letters from parents who have not been able to pay the doctor's account for services rendered at the last child's birth and are ashamed to ask him to come again, asking "What are we to do?"

We must educate the mother about the need of pre-natal care. It is going to take a long time to do it. The late Prof. J. W. Ballantyne, of Edinburgh, began this movement in 1901. We have not made very much progress in these twenty-five years. The mother never before has sent for the doctor till the birth is near. Why should she now? She does not like to be examined and questioned. We must meet her halfway. Doctors and nurses must be able and willing to give advice acceptably and mothers must be ready and anxious to receive it. Many doctors and nurses say they believe in pre-natal care, but their actions speak louder than their words and it is well known that some patients who have been persuaded, often with difficulty, to consult a doctor for pre-natal care, have been dismissd by the doctor with scant attention. Nine of our letters of advice from physicians contained this statement: "Doctors do not take these cases seriously enough."

We must educate the medical profession.

It is essential also to get the father's understanding and help in pre-natal work. We shall never really succeed till we do and then we shall have gone a long way towards educating the general public.

The most significant words of the whole Enquiry were contained in two of our letters of advice. "In short, maternal life is held in too light esteem. This I believe to be a very common cause of maternal death."

"The people in this district do not give much attention to pregnant women."

Death Before Labour.

In 110 cases the death of the patient occurred before labour.

Primipara.

Three hundred and forty-nine were primipara.

Multipara.

Nine hundred and sixty-three were multipara.

Death in Labour.

In fifty-seven cases the death occurred in labour.

Forceps.

Forceps were used in 289 cases, or 19 per cent of the total number.

"Still we hear the boast of the advantage of the routine abrogation of the second stage by a version and extraction; or by the use of the so-called prophylactic forceps. In a word, the boast of a vicarious labour on the part of the obstetrician. A dangerous practice this, and a still more dangerous teaching, for in unskilled hands such measures are inevitably disastrous, and they may be even criminal. In the practice of obstetrics, nothing can be worse than an untimely, a premature interference."—(Prof. W. W. Chipman, "The Canadian Medical Association Journal," June, 1926.)

Fifty-six letters of advice mention hurry on the part of the physician as a cause of the use of forceps and four other letters state that the cause is the wish of the patient and her friends.

Six letters point out the danger of injury to the child, such as deformity, paralysis, and cerebral hæmorrhage, by the use of forceps.

Pituitrin.

In 327 cases pituitrin was used. This is 21 per cent of the total number. Rupture of the uterus occurred in 3 of the above cases.

In 5 of these pituitrin was used before labour, and in order to bring labour on. In 9 cases it was used in the first stage. In 123 cases, in the second stage. In 32 cases in the third stage, and in 50 cases it was used post partum.

In 11 cases pituitrin was used during or after the operation for Caesarian Section.

In the other 97 cases it was stated only that pituitrin was used, but no further information was given.

Twelve letters of advice mention pituitrin, two with approval. The other ten state that it is dangerous and one physician says that he knows of "many unfortunate women who were killed by this violent drug."

Hospital Care.

In 385 cases the birth occurred in a hospital. This is 25 per cent of the total number.

Hospital Map of Canada.

In order to obtain information as to the medical and nursing care available for maternity patients in hospitals, requests were sent to the provincial authorities and hospital superintendents for information as to the hospitals of Canada, the total number of hospital beds, the number available for maternity patients, and the number of births that had taken place in each hospital in the year 1924. This information was compiled and a Hospital Map of Canada was prepared at the request of the deputy minister by the Natural Resources Intelligence Branch. By special request, the printing of this part of the report of the Enquiry was proceeded with at once, and a copy of the Hospital Map and List has been sent to all members of the medical profession in Canada who returned the reply request-cards for it which were mailed to them by the department. The number of requests received in this way was 2,883.

The Hospital Map of Canada with List was published and mailed on September 17, 1926. Every effort was made to secure accuracy but it is regretted that seven hospitals have been omitted from the List.

The number of maternity beds in Canadian hospitals in 1925 was upwards of 5,079 and the number of births which took place in hospitals in 1924 was 38,634, or 16 per cent of the total number of births in Canada in that year, which was 244,525.

Apparently these beds are not used to capacity. Two or three times as many maternity patients could be cared for per annum in this number of beds.

General Care.

In one case it was stated that there was no adequate domestic help or care for the mother in home, and in two cases that she was alone, the husband being absent from home. In 68 cases the doctor stated that the patient was very poor. The same thing was mentioned 24 times in the letters of advice. In the above 71 cases it is evident that, in the opinion of the physician, a better state of things would have saved the mother's life.

Patient's Work.

In three cases only was it mentioned that the patient's work outside the home had an influence on the fatality. In 67 cases it was mentioned that the patient was overworked with the care of her children and the labours of the house and home.

In 27 cases it was stated that her rest and sleep were not sufficient.

Previous Medical History

General Health.

The general health of the mother was poor or bad in 153 cases. In 44 cases anaemia was mentioned, in 7 cases typhoid fever, in 9 cases venereal disease, and in 31 cases nephritis. Serious infection of the teeth was mentioned in 30 cases and infection of the tonsils in 10 cases. It is indicated that better health and freedom from infection would have saved the mother's life at this time.

Tuberculosis

The number of these mothers who were reported as having tuberculosis was 96.

A letter of advice contains the following:—

"There is no doubt that pregnancy and childbearing constitute for a tuberculous woman a very great risk and that latent tuberculosis frequently becomes activated by the cycle of pregnancy and maternity."—(Dr. D. A. Stewart, Medical Superintendent, Manitoba Sanatorium.)

"The strain of child-birth may not have been enough recognized. The child-bearing woman may not have been enough safeguarded. This extra burden may not have been enough provided for. Under ordinary conditions where the woman is the housewife, perhaps with duties even outside the home, with one child scarcely on its feet before another is in the mother's arms, with bad housing and perhaps some special cause of worry or discouragement, with the care of fretful and sick children—is it difficult to understand a breaking down of resistance and a lighting up of even a deeply buried focus (such as may almost be considered universal) into active disease?

"After early adult life has been reached the cause of tuberculosis is not the tubercle bacillus but overstrain. An intelligent application of this truth would safeguard the health and life of many an over-burdened child-bearing woman."—(Ibid. Paper read before the Canadian Tuberculosis Association, 1917.)

Influenza and Pneumonia

In 41 cases influenza is mentioned in the previous medical history and in 28 cases pneumonia. In 63 additional cases the mother had both influenza and pneumonia. Total number of cases where influenza and pneumonia, singly or together, prevented the saving of the mother's life—132.

"Pregnancy, especially in the later months, is a serious complication of any of the organismal febrile diseases such as typhoid, scarlet fever, measles, pneumonia, etc., and in turn these diseases have a very deleterious effect on the

pregnancy. Influenza is no exception to the rule, and in the present severe epidemic, complicated as it has been by so many cases of pneumonia, has proved itself a particularly fatal condition in the pregnant and puerperal woman. On theoretical grounds one would expect a pregnancy at the later months to be a severe handicap in a patient suffering from pneumonia. Cyanosis and dyspnoea will be more marked owing to the restricted use of the diaphragm, and the patient's powers of elimination are already strained to the utmost by the pregnant state. In ordinary cases of pneumonia the pregnancy is interrupted in 60 per cent of the cases and the mortality is somewhere in the region of 36 per cent.

"In the peurperal state, if pathogenic organisms are present in any localized forms or in the blood, there seems to be a greater tendency for them to multiply, diffuse, and increase in virulence so that the patient suffers from a severe toxaemia often fatal.

"It must therefore be conceded that the present epidemic has been specially severe in pregnant and parturient women. Whether they are more liable to the infection than the non-pregnant it is impossible to say, but it is most important that extra precautions be taken to guard them against infection."—(Prof. B. P. Watson, 1921.)

Cardiac Disease

In 95 cases pre-existing cardiac disease was mentioned as lessening the mother's chances of life, and in 190 cases, including 59 of the above, cardiac disease was given as a cause of death. Total, 226.

The following letter of advice was received:—

"Cases of mitral stenosis should not marry without being warned of the danger of pregnancy, and if they are already married should not be allowed to become pregnant without being told that they run considerable risk of making the heart worse.

"There are three ways in which the heart is made worse by pregnancy. (1) The increased strain thrown upon the circulation by the pregnancy itself on account of the added circulation and on account of the increased abdominal pressure, interfering with the descent of the diaphragm. (2) The strain of labour itself, which in case of mitral stenosis occasionally is fatal. (3) The increased strain thrown upon the heart by the increased work necessitated by the care of the child afterwards. In a case with mitral stenosis or any cardiac disease in which myocardial failure (broken compensation) occurs, the patient should immediately be put to bed and kept there under observation for a few weeks. If there is no improvement the pregnancy should be terminated. If there is improvement the patient should be carried on until the foetus is viable, and then a Caesarian Section done. A Caesarian Section done under favourable circumstances is a far less strain on the heart than the average labour. Before the Section is done the patient and her husband should be consulted as to the advisability of inducing sterility by section of the tubes. If at the time of the termination of pregnancy there is myocardial failure with passive congestion, the patient should be kept in bed until the circulation is normal, and then for a further period of four weeks, in order that the heart may regain some reserve. Following this the ordinary advice should be given that is given in cases with chronic heart disease."—(Dr. J. A. Oille.)

History of Previous Pregnancies

In 19 cases the physician stated that previous pregnancies had been too frequent and at too short intervals, such as "five children in six years." In seven cases it was stated that pregnancy had been forbidden but the advice had been disregarded.

The following is quoted from a letter of advice:—

"Very often again the health of the pregnant woman is neglected or not properly looked after; consequently she becomes run down and weakened mentally and physically, so that when the time comes she is in no condition to go through labour successfully. Again as I have found it very often in this northern country, a mother has not time to properly recuperate from one labour to another, because it is a frequent occurrence for a mother to bear a child every year, which soon saps her strength and endurance."

History of this Pregnancy and Labour

In answer to the question: "By what means might this death have been prevented, considering the history of this pregnancy and labour?" the cause of death was frequently given without further comment.

Sepsis

In 418 cases, or 27 per cent of the whole number, puerperal septicaemia was given as the cause of death.

"Puerperal mortality is an international subject, and one which should engage the urgent interest of the League of Nations in even greater degree than it appears yet to have done. Puerperal sepsis is by far its greatest single factor.

"The outstanding fact is that, for some reason or group of reasons not yet fully demonstrated, obstetrics throughout the known world has not shared in like degree with other departments of medicine in the benefits conferred on mankind by the researches of Pasteur and Lister.

"The real concern of the profession is aroused, and that is all to the good, but more significant still is the portent that the public is asking, and asking pertinently, if this calamitous disease is preventable, why it is not prevented?"—(Sir Ewen Maclean, M.D. The Academy of Medicine, Toronto 1926. "The Canadian Medical Association Journal," 1927).

Haemorrhage and Placenta Praevia

Placenta praevia occurred in 76 cases and haemorrhage was stated as the cause of death in 357 cases or 23 per cent of the total number.

"Ante-natal work will reduce the accidents of parturition to a small figure, but can never eradicate the factor of haemorrhage entirely."—(Interim Report of B.M.A. Committee, B.M.J., 9.1.26).

Toxaemias of Pregnancy

Pernicious Vomiting

Pernicious vomiting of pregnancy was the cause of death in 47 cases. Nausea and vomiting occur in about 50 per cent of all pregnancies.—(Prof. V. J. Harding).

Phlebitis

Phlebitis is mentioned as a cause of death in 22 cases.

Nephritis

Nephritis is mentioned as a cause of death in 80 cases.

Eclampsia

Eclampsia was the cause of death in 195 cases. Total number of deaths from pernicious vomiting and Eclampsia, 242, or 16 per cent of the total. Adding the deaths due to phlebitis and nephritis the sum is 344, or 22 per cent of the total.

Related Conditions

It is, moreover, probable that accidental haemorrhage and other grave conditions should be included with the toxaemias of pregnancy.—(Prof. V. J. Harding).

"Dr. F. J. Browne, Royal Maternity Hospital, Edinburgh, has investigated the problems of accidental haemorrhage and placental infarction. Observation of clinical cases had shown that chronic nephritis was often a forerunner of accidental haemorrhage and seemed to predispose to it: by experimental work based on this relation Dr. Browne has found evidence that brings the accidental haemorrhages definitely into the category of the toxaemias of pregnancy."—(Report of the Medical Research Council for the year 1925-1926.)

"The causes of eclampsia and related toxaemias of pregnancy are to be found among the causes of abortion and premature birth, namely those which operate by means of placental damage."

"There is now much evidence for the view that the late pregnancy toxaemias, whether eclamptic or nephritic, have a similar origin in the diseased placenta, and that kidney damage in such cases is secondary and often aggravated by successive toxic pregnancies. This is supported by my own investigations and by those of others, which indicate that chronic nephritis might succeed even one eclamptic attack."—(Dr. James Young, the Edinburgh Obstetrical Society, January 12, 1927, page 290, "The Lancet," 5.2.1927).

Every ante-natal clinic shows by its work that eclampsia is a preventable disease. The investigations of the Joint Committee of the Medical Research Council and the Obstetrical and Gynaecological Section of the Royal Society of Medicine indicate that the number of cases in which eclampsia comes "as a bolt from the blue" without any warning signs is very small.

In Toronto General Hospital, Burnside Wards, and elsewhere, salt has been omitted from the diet of pre-eclamptic patients. Over one hundred patients have been greatly benefited by this procedure which allows carbohydrate and other foods in sufficient quantity. It is therefore recommended as a preventive measure that all pregnant women should, in the last half of pregnancy, add no salt to their food at the table and should take a salt-free diet for one week out of each month.—(Prof. W. B. Hendry, Dr. Van Wyck, Prof. Harding).

Embolus

In 87 cases the cause of death was pulmonary embolus.

Dystocia

In 87 cases it was stated that the labour was long and hard, leading to exhaustion and shock.

Shock

In 63 cases shock was given as the cause of death.

Ectopic Pregnancy

Ectopic pregnancy occurred in 33 cases.

Professional Nursing and Household Help

The absence of proper post partum care, especially of skilled nursing or even of household help was mentioned in 6 cases as the cause of death. In one of the letters of advice the doctor made a tabular analysis of his last 200 cases as follows:—

200 Consecutive Cases	Nursed by a fully trained Nurse either at home or in Hospital	Nursed by a fairly competent but untrained Practical Nurse	Nursed by a relative, housekeeper, or neighbour, who did not claim to be a Practical Nurse
Normal Puerperium after a normal labour	18	61	90 = 169
Normal Puerperium after an abnormal labour (forceps, version or P.P. Haemorrhage)	4	10	3 = 17
Abnormal Puerperium (Mild form of short duration or Femoral phlebitis) after a normal labour. (Recovery)	.....	1	8 = 9
Abnormal Puerperium after an abnormal labour. (Recovery)	.....	.....	3 = 3
Severe Septicaemia after a normal labour	.....	.....	2 = 2 One death.
	22	72	106 = 200

Midwives

Forty-eight of these mothers, which is 3 per cent of the whole number, were attended by midwives, and in nearly all these cases the midwives were untrained. In 9 cases they were described as "very bad", and in two cases it was stated that the unskilful and ignorant actions of the midwife were the cause of the patient's death. In two cases, manual removal of the placenta was done by the midwife.

"A neighbour woman acted as midwife. Digital vaginal examinations are very frequent in these cases."

"Too frequently women depend on neighbour women nursing them through the puerperium and practical nurses are not as efficient as they were forty years ago."

"It is possible that, were those women—of whom there are hundreds, particularly in small towns and country places—who make a living by attending maternity cases, to have some definite qualification and understand something about antisepsis and asepsis, there would be fewer infections."

"In New Brunswick and Saskatchewan, the provincial authorities are making a list of the names and addresses of all such women who attend at births, with a view to further action."—(Letters of Advice.)

Medical Attendance and Care.

In 128 cases, or 8 per cent of the total number, the doctor was not called till the patient was in labour. In 101 cases no doctor was present at the birth. In 27 cases the doctor was not called until the patient was dying. In 91 cases the doctor was not called until some days after the birth. In 18 cases the death certificates had no signature. In other words 237 of these mothers, or 15 per cent of the total number, had no medical attendance at the birth. In 8 cases the distance between the patient's home and the nearest doctor is mentioned, varying from 35 miles to 74 miles.

The Canadian Medical Association, at its annual meeting in 1926, appointed a Committee on Medical Survey. Doctors are vanishing from the rural parts and do not often go to the outposts.

This situation was discussed by Dr. George S. Young in his presidential address before the Forty-eighth Annual Meeting of the Ontario Medical Association in 1925.

Dr. Young made a valuable suggestion as to the sending of the recent graduates to the more isolated parts of Canada where they might "render medical service to those of our people who are really pioneering for us, and who would, otherwise, have to struggle on without medical attention." He has, by request, in a letter to the department, given an outline of how such a plan might be tried in one district for each province, with the co-operation of the provincial authorities and the universities.

Twenty-eight letters of advice have expressed the opinion that the Government should pay part of the expenses of the physician in rural and remote districts.

There were 26 "Municipal Doctors" in the province of Saskatchewan in 1925.

Operations.

One hundred and thirty-six operations were reported. 58 Caesarian sections, 49 versions, 27 curettements, 1 operation to relieve intestinal obstruction and 1 symphysiotomy.

Eighteen physicians, in letters of advice, expressed the opinion that the operation of Caesarian Section is done too often.

Conclusion.

From the medical point of view, our maternal mortality in the 59th year of Confederation was 1,532.

The average annual maternal mortality in Canada for the five years 1921-1925 is 1,221.—(Dominion Bureau of Statistics and Statistics of the Province of Quebec.)

These figures are unknown to the general public, and even to the medical profession. Letters of advice express surprise and amazement at such a heavy loss, or state that the writers had been shocked at the mortality, which they call "appalling".

Mrs. Waagen, of Calgary, in the report of her Red Cross journey to Pouce Coupe and the Peace River in 1925, speaks of revisiting a home where, in her former visit, "The kindness of the mother made up for every discomfort. In the interval between her two visits the mother had died and the henhouse had to be torn down to provide boards for her coffin. Her children were growing up like wild creatures of the woods."

"Listeners-in on an Edmonton radio broadcasting station in the early months of the year might in fact have caught the name Aklavik announced in the middle of the evening program, as a special message for the North made its way through the clear air to be caught by a waiting husband in the little settlement. After the name came the simple words, announcing the news from an Edmonton hospital: 'A son has been born. We regret to say the mother did not recover.'"
—"Mail and Empire", Toronto, October 25, 1926.

To what purpose are our boundless resources if we cannot provide for the mother and her children? Of what use is the rapid development of the radio unless we can send better news than this?

His Majesty the King, in an address delivered when he opened the new House of the British Medical Association in London in 1925, said: "The welfare of my people at home and throughout the Empire largely depends upon an efficient and well organized health administration. The protection of maternity, the care of the child . . . . are matters of vital importance."

The CHAIRMAN: We have just heard a most interesting paper dealing with a subject of vital importance and one which I am sure will receive all the consideration we can give it. I trust, in spite of the fact that our numbers are necessarily depleted because some have had to leave to catch trains, we will have a discussion of value on this important subject.

Dr. J. A. BAUDOUIN (Montreal): This is a very important question indeed, and so far as I am concerned, I do not know anyone in this country who could have so persistently, ably, and satisfactorily performed this inquiry as has Dr. MacMurchy. We are indebted to her for the information she has gathered from all over the country. This question has been brought before the public very much of late, and as I have had opportunity to study it in the province of Quebec, I think it would be a good thing for me to add a little information regarding that province.

We always relate maternal mortality to the number of births, and are inclined to think that the higher the number of births, the higher correspondingly must be the number of deaths from equivalent causes. If we take the average number of deaths from puerperal causes in the province of Quebec in the decade 1912 to 1921, we find an average number of 328 deaths per year, that is nine-tenths of one per cent of the whole number of deaths occurring in the province. To have an idea of the situation, we must deal with the rates. These rates are always referred to the number of live births in a unit of population. Since 1896, that is, so long as we have had vital statistics in the province of Quebec, I think that a glance at the chart I have here will show a very slight but still perceptible decrease in the lines. The following are the figures we have collected showing the averages for five-year periods. In the five-year period 1896-1900, the rate was 4.6 per 1,000 births; in 1906-10, the rate was 4; and in the last five-year period, 1916-20 (we have not yet available the 1925 figures), the rate was 3.9, so you will see there has been a small decrease.

To analyse the situation properly, one has to make a comparison between the rates that we get in the different provinces of Canada. I have taken the last years for which we have the proper information, that is, 1921, 1922, 1923, and 1924 combined, and this is the result that we have arrived at. Saskatchewan has the lowest death rate with 3 per 1,000 births; Alberta is second with 3.2; Prince Edward Island is third with 3.5; Quebec fourth with 3.9; New Brunswick fifth with 4.6; Manitoba sixth with 5; Ontario seventh with 5.4; Nova Scotia eighth with 5.8; British Columbia ninth with 6. For the whole of Canada we have a rate of 4.9. We see here (pointing to the chart) a discrepancy between the birth rate and the maternal death rate. We all know that in the province of Quebec we have the highest birth rate in Canada; it is between thirty-five to thirty-seven per 1,000 of the population per annum. Notwithstanding that fact, the province of Quebec is the fourth in the whole Dominion. In British Columbia, on the other hand, we notice the lowest birth rate and the hightest maternity death rate, so we see where we have to try to work to improve these conditions. An analysis of each group, so far as the province of Quebec is concerned, shows that 73 per cent of these deaths come in the age period 25 to 44.

Another way of attacking the problem is to divide these deaths by their causes, and one division that can be taken is the post-natal compared with the pre-natal causes. If we calculate each of these main causes per 1,000 births, we separate one from the other. We have the following. We notice in the five-year period that the rate of mortality of the post-natal causes shows a slight decrease. The figures are as follows:—

1896–1900	3.7 per 1000 births
1901–05	3.5 per 1000 births
1906–10	3.1 per 1000 births
1911–15	3.1 per 1000 births
1916–20	2.7 per 1000 births

This shows a slight decrease, whereas if we examine the rates of the pre-natal cases, there is no sign of decrease or improvement in any way. The rate is always standing. This analysis, it seems to me, leads to the following conclusion, that the rates all over Canada can well be improved. We see further

that we have got to strive to improve these figures, because the lives that we are losing from these causes are most precious. They are all women in the important age period of 25 to 44. Now how can we realize this most important object of the campaign? There are two ways, I understand, to improve the condition. The first is to increase the nursing service to the mothers, and I am glad to see in this audience Miss Smellie, who is head of the most important organization of visiting nurses in Canada, the V.O.N., and to say that the more help our population will get from that important organization, the better it will be for the saving of lives of our mothers.

The second direction in the campaign will be to increase the supervision of mothers before the birth of the baby—the pre-natal care to women. The more you instruct mothers in the important necessity of putting themselves under the supervision and advice of the family physician, the more we will benefit all the provinces, in preserving these precious lives: our mothers!

The CHAIRMAN: Is there any further discussion?

Miss E. SMELLIE (Victorian Order of Nurses, Ottawa): I have to thank Dr. MacMurchy for her very illuminating paper, and Dr. Baudouin for his kind reference to our organization.

I would like to say that in co-operation with the physician we take care of about 11,000 maternity cases a year. Our work is increasing and extending. The weakest link in the chain has been the pre-natal nursing care.

Our aim must be more and more as we come in touch with these mothers to direct them to the doctor's attention earlier in their pregnancies, and I think because of the extent of our program, because we care for mothers before, during, and after their babies are born that in the centres in which we exist we are more and more able to do this as a result of having personal contact with them. At the present time we have sixty-six centres in Canada and two hundred and seventy nurses. Financially we are not able to expand as we would like. We opened four districts last year and are opening four this year—one, I am glad to say, in co-operation with Dr. Seymour, in Saskatchewan. I hope we will be able to tell you something about that later on.

The CHAIRMAN: Is there any further discussion?

Dr. C. D. PARFITT (Gravenhurst, Ont.): I regret that I did not have the privilege of hearing Dr. MacMurchy's paper, but I should like to refer here to the Canadian Red Cross Society's efforts to meet this situation in the nearly fifty outpost hospitals that they have established in northern Ontario, New Brunswick and the western provinces. The reports from these hispitals, situated in outlying scattered communities of Canada, are most encouraging and show that the mortality records in these institutions regarding mothers and children who are being attended solely by nurses compare most favourably with those of the best lying-in hospitals; also the home nursing classes of the Canadian Red Cross Society that during the last few years have been developed promise much, I believe, to offset the terrible maternity and child mortality that Dr. MacMurchy has spoken of.

The forthcoming program of the Red Cross Society to raise a large amount of money to carry on this peace-time program deserves, I believe, the enthusiastic support of the medical profession. The campaign is to be conducted between May 24 and July 1 this year, and one of the main objects is to increase these outpost hospitals that will mean so much to the mothers of Canada.

The CHAIRMAN: Before asking Dr. MacMurchy to reply, I wish to state that we are greatly indebted to her for the amount of labour and energy she has expended in bringing these facts to our attention and I am glad they are to be put on record as part of our conference proceedings. I feel quite sure this is

not the end of the matter but that the paper she has just read, and which we have discussed, will receive further attention, particularly, I hope, through the channels of the national association.

Would you like to reply now, Dr. MacMurchy?

Dr. HELEN MACMURCHY: I have nothing to add, Mr. Chairman, except to thank you. As everyone present knows, this inquiry was made in consequence of a resolution passed two years and three months ago at the First Conference of the Medical Services in Canada. I would respectfully express the hope that the results may be made available to the profession and to the public.

Dr. SEYMOUR (Regina): Mr. Chairman, I am pleased to hear you say that this valuable paper will be added to the proceedings of the conference. There is much valuable information in it to be made use of.

The CHAIRMAN: Dr. Wadge will present his paper on "Some Medical Aspects of Immigration."

Dr. H. W. WADGE (Winnipeg): In my hurry this forenoon I forgot to mention, in connection with the Indians, that we had made progress in Manitoba to this extent. We had persuaded the two main hospitals concerned in Manitoba to withdraw their agreement with the Department of Indian Affairs. The Winnipeg General Hospital withdrew their agreement last month and the St. Boniface Hospital has sent word to the department that it will terminate its agreement on June 1.

As regards the Medical Aspects of Immigration, I am afraid that perhaps some of my statements will be a little out of date. It was not my desire to present this paper but I was asked to prepare it.

SOME MEDICAL ASPECTS OF IMMIGRATION

Dr. H. W. WADGE (Winnipeg): The records of immigration in the decades from 1830 to 1870 reveal the appalling state of the immigrants during that period, especially as to the conditions of sanitation during ocean transit, and their conditions of health and illness on arrival. Large numbers of them were absolutely indigent, many having been paupers in their home lands, and thus were immediately dependent on charitable organizations and individuals, to give them assistance. In those early days neither the Federal nor the Provincial Governments did anything in a practical way to assist their settlement, and in the earlier part of that period there were not even immigration halls to accommodate them temporarily. Then again there was practically no examination as to their state of health before sailing, and indeed for a long time neither was there on landing. Gradually, however, improved methods of medical and general supervision were evolved, until to-day, though not perfect, the conditions of immigration from all points of view are tremendously improved.

Now we have in our country of Canada a vast land with marvellous and practically inexhaustible resources in agriculture, mines, forests, fisheries, etc., capable of sustaining in health and comfort many millions of people. We have been busy exploiting these resources to the utmost of our financial ability, but possibly we have been overdeveloping in proportion to our population, as already we have railroads sufficient for two or three times the population we now have. On every side we are ready for steady and rapid expansion. Our development of agriculture, of fisheries, of water-powers, and of mining has been very great, our industries are growing apace, and our commerce is rapidly spreading abroad. In our professions we are providing an abundance of virile men and women capable of leading and directing the efforts of the nation in every phase of its

growth; indeed we are prodigal of our production in the professions. In our own profession of medicine, so many graduates have we yearly that now approximately 20 per cent to 25 per cent of them leave Canada to practise abroad.

And so it is evident to all that we require more population to share the opportunities and responsibilities of our country. On all sides and from public men in many walks of life, the need of more population is told and repeated over and over again, but generally the implication is that we must obtain this population by increased immigration. Few there are that refer to the fact that one of our chief needs is to check the heavy leakage from our lands by emigration. Our figures of immigration are badly marred when we deduct from them the numbers that leave our country. Our present rates of immigration of 100,000 to 150,000 per year would be very satisfactory indeed, and would be as many or perhaps more than we could properly assimilate, but these numbers have been depleted by 30,000 to 50,000 per year by the outtrekking of so many of our immigrants and of so many of our own people.

One of our chief needs then is the prevention of this great leakage, resulting in the alienation of so many of our people. How can this be done? So far this problem seems to have been more or less a political football but now there are signs of its solution.

One of the greatest steps forward in this direction was the establishment of the Soldier Settlement Board. This board assisted returned soldiers to settle on farm lands and supervised their general work and methods, with the result that 75 per cent of these men have made good. Though there will always be a considerable number of failures in every group of men, still the percentage of failures here appears to be rather high. But on a close study of the situation we find that a very large proportion of the failures were more the fault of the board than the fault of the men. The chief reasons for this fault were: 1. The inexperience of the board and its officers in the early years of its efforts; 2. The unduly high cost of much of the land, stock and equipment; 3. The unsuitability of some of the land for the settlers; 4. The unsuitability of some of the settlers for the land. However, now that the board has had several years of experience and has many efficient and well trained officers, it is accomplishing its work at the present time with a high measure of success.

So much so is this the case that the Hon. Robert Forke, Minister of Immigration, has established in his department this principle of expert supervision of the settlers coming in from both the older provinces and the older lands. This being the case, we can now assume that the Federal Government has at last definitely adopted a real policy of colonization which will be more effective in increasing the population of the country than any past policy of merely inducing immigration. From now on no doubt the settlement of the immigrants will be supervised in such a way that the progress resulting will lead to a greater measure of prosperity and contentment than ever in the past. Yet there appears to be a serious weakness in the plan. With all the care used in devising the present methods of supervision, it seems almost incredible that no arrangement has been made for the proper medical care of soldier settlers and immigrants on homesteads, etc., throughout our country.

The need of such service is very great indeed. Under present conditions, many cases of acute illness receive no medical service whatever and so there are serious losses of life where often this might be prevented. Also in chronic conditions, many cases go on for years without proper attention because it is not available. Because of the delay in securing suitable care, many of these become, later on, a charge on the public. And in both acute and chronic conditions, a more serious feature is that many of these ill people are a menace by way of infection to all those round about them.

Again, even if medical service is available within reasonable distance, there are districts which, by reason of their general impoverished condition, cannot avail themselves of such service. The rural physician cannot afford to take frequent trips of many miles to the country without a fee, and justice should not require him to do so; a small town hospital cannot maintain itself and take in these patients free, and the rural municipality burdened with its own material difficulties cannot assume the expense of their hospital and medical care. Consequently these sick people and their families find their way to our cities, whereby the productive effort on the land of such families is lost. Instead of being a help in the development of the country, they soon become a burden on the city to which they go. And those who are ill, drift into the public wards of our hospitals. Our city hospitals have many such cases coming in continually. They cannot pay for themselves, and no one else wants to pay for them, neither the rural nor the urban municipality, neither the provincial nor the federal Government.

As illustrating these statements take for example certain districts and conditions in Manitoba.

The little village of Vita is approximately 25 miles east and 50 miles south of Winnipeg, and so one might say not very far removed from a metropolitan centre of advanced modern medical service. This village is fairly central to a district of about 25 townships, i.e., of about 900 square miles, containing a population of approximately 8,000 people, almost all of whom are non-English speaking and mostly Ukrainian. About half of these people live in the municipality of Stuartburn. In 1923 in this municipality there were 1,285 resident farmers, with a total population of 4,248. Now the assessed value of their land and their chattels at that time was only $70 per capita, whereas the average assessed value of real and personal property in Manitoba at the same time was $1,188 per capita; that is to say, the average per capita value for the province was 19 times greater than the per capita value for this settlement. The impoverishment of this district is shown also by another set of figures. These 1,285 farmers had under cultivation in 1923 an average per farmer of only 19¼ acres of land, and they possessed in live stock an average per farmer of only 1⅛ horses, 4⅔ cattle, 1½ pigs and ⅓ sheep. There was no doctor in this district, the nearest resident physician being at Emerson 33 miles away from the village. Consequently many of the people being more remote were 40 and 50 miles from medical help.

The health conditions of the municipality corresponded to its financial condition. The vital statistics of this municipality for the eight years ending December 31, 1922, showed 1,397 births, 240 marriages and 403 deaths. Of the deaths 320 or 80 per cent died under four years of age, 170 under one year and 46 under two weeks. The figures for the last year, 1922, show 177 births and 64 deaths and only four doctors' visits for that time. In the latter case the death rate was 16 per 1,000.

The following year a hospital was erected in this village by one of our religious organizations. Its staff consists of a resident doctor and two nurses, with a third nurse as required. Twelve to fifteen beds are in use most of the time, though, if necessary, the hospital could accommodate 30 patients. Since its establishment, a great improvement has taken place in the health conditions of the whole community. In 1926 the number of deaths in the municipality was 31, or a rate of 8 per 1,000, which is just half of the rate in 1922.

Then again, the Red Cross Society since 1920 has been attempting to help supply medical service in similar districts. In equally remote and destitute, though perhaps not such populous districts, they now have five nursing stations, each with a resident nurse. They also have an itinerant doctor who visits

each station in turn, spending approximately four to five days at each place once a month. The nurses are really doing the work of family doctors, though they refer the more difficult cases to the visiting physician when he arrives. The following figures will give you some idea of the work done by the nurses in these five stations during the year 1926:—

Calls of patients at Nursing Station for advice and help	2,895
Visits to homes by Red Cross nurse	1,624
Confinements attended in homes by Red Cross nurse	114
Schools visited by Red Cross nurse	53

This is an exceedingly great and useful work to the people of these districts and greatly to be praised. Let me emphasize the following quotation from the last report given at their annual meeting in Winnipeg two weeks ago: "Apart from the physical advantages received, they have been the means, to a large extent, of sustaining the population in the districts, *as many letters have been received from settlers to the effect that if the Red Cross had not maintained this nursing and medical service, they would have been compelled to move in order to secure the necessary protection for their families.*"

As the result of this good work, the Red Cross Society has been asked over and over again to open up new stations and right now could open 10 to 12 similar stations in other districts equally remote from physicians, were they financially able to do so.

But excellent as this service is, there is little or no help for thousands of our settlers in emergency medical and surgical cases and in difficult maternity cases, generally for the reason that no medical service is near enough to be readily available at reasonable expense. Twice has the Red Cross sent a physician from Winnipeg to difficult maternity cases 60 and 70 miles away.

In 1924, Dr. Alfred Cox, Secretary of the British Medical Association, while addressing a medical convention in Winnipeg referred to our great country, our vast prairies and our need of population. In this connection he stated that one of the chief requirements in attracting British immigration would be the assurance to the intending immigrants that wherever they settled they would be within reasonable distance of good physicians and prompt medical service.

Can we honestly assure intending immigrants that such is the case? Most certainly no. Should we be able to do so? Most certainly yes. Why are we not able to do so? Partly, perhaps, because of divided authority, but chiefly, no doubt, because the Federal Government ignores its responsibility in this matter. The Federal Government appears to take it for granted, when it induces or persuades people to come as immigrants to this country, that its responsibility for them then ceases; and that if these immigrants require relief or medical aid, it is the duty of the province or the municipality or the local doctor or the charitable public to provide the same. Such a view of immigration is surely far removed from the more sane and humane view that immigration should be but an incident in the real process of colonization of these prospective citizens and that the government of the country should assume all the responsibility for them until they either are properly established or are deported as having become public charges. Why should the medical profession, or the charitable public, or even the hospital or the municipality, be expected to give service which should be given by the Federal Government? These new citizens, if successful, will be far more valuable to the country at large than to any municipality.

One might ask also—why should not the Federal Government seek advice and assistance from the Canadian Medical Association in planning and securing medical service to our settlers, even as the British Government sought the assistance of the British Medical Association in making arrangements for a

sufficient medical service for both military and civil needs in Great Britain in the recent great war? Surely if representatives of the Canadian Medical Association, of the Department of Immigration, and of the Department of Health, carefully studied this question together, a plan could soon be evolved that would meet the needs of the settlers throughout the country. It is an anomaly that approximately 20 per cent to 25 per cent of our medical graduates go to other lands to practice when we have so many sections, especially in the newer parts of the provinces, so greately in need of medical service. The provision of medical service to our new settlers should be arranged by the Federal Government in the same way as they arrange for the building of railroads, the construction of harbours, the establishment of mounted police, etc. Speaking of the police, is not the protection of the health of the people as important a matter to the Government as the protection of their property?

It is generally recognized that impaired health of a large portion of the population is one of the most serious economic liabilities that any country can suffer from. The provision therefore of medical service to new settlers in their home districts is as essential to their ultimate welfare as any assistance that may be given them by the new colonization method under the supervision of the Soldiers' Settlement Board. No doubt the provision of such service would prevent many from leaving the farm and congregating in our cities, or emigrating to other countries .

This brings us then to another aspect of the medical care of immigrants. On account of its geographical position as the gateway city to all the West, Winnipeg has a larger flow of immigrants coming to it, and being distributed from it in every direction over our prairies and mountains, than any other city in Canada, except Quebec.

During the years 1911 to 1914, Canada had its greatest annual influx of immigrants, the totals for each of those years being respectively: 311,084, 354,237, 402,432, 384,878. But during the war those numbers were very materially reduced and are only slowly increasing, since, for the last four years, *i.e.*, for the fiscal years ending March 31, the totals have been for 1923—72,887; 1924—148,560; 1925—111,362; 1926—96,064. To the 96,064 immigrants for 1926 we must add 47,221 returning Canadians, thus making an actual total of 143,288 incoming people for 1926.

Of the total number of immigrants landing in Canada via Atlantic ocean ports during the last few years, approximately 35 per cent travel directly to Winnipeg where they are distributed throughout the four western provinces. Thus the approximate number from Europe reaching Winnipeg for the fiscal year 1925-26 was 26,000. Of this number 13,276 were accommodated in No. 1 and No. 2 Immigration Halls, with an average stay of four days. Or in other words there was accommodation given to incoming immigrants at these halls for 53,104 days.

The figures for 1926-27, for the fiscal year ending to-morrow, are of course not complete, but for the ten months ending January 31 of this year, the total immigration was 118,199. For the last two months, the immigration has been very much higher than for any year during the last decade. Undoubtedly, the immigration for this coming year will be very high indeed.

American hospital statisticians have estimated that 2 per cent of the general public are ill all the time. Supposing that we apply this percentage of illness to these 13,276 immigrants remaining at the hall in Winnipeg for four days each, *i.e.*, for a total of 53,104 days. On this basis then we should have in this number of immigrants, 1,062 days illness or 265 people ill, each for four days in the immigration halls. This of course is simply amongst those that remain at the

Hall and does not include those who go directly forward to their destination. And as the immigration increases, as it is doing rapidly this year, these figures for illness will increase in proportion.

What does the Department of Immigration do about such cases of illness. In Winnipeg the department has a doctor available on call. If the religious or national compatriots, for example: Mennonites, Hebrews, Scandinavians, Ukrainians, etc., meet these immigrants, or if friends of the patients are on hand to meet them, then the department is very willing to let these compatriots or friends assume the care and responsibility and cost of such patients, but if there are no such Associations or friends to help, and this appears to be the prevalent condition in the case of British settlers in particular, then the doctor is called. If he considers the case requires hospital treatment, the patient is sent to the public ward of a hospital. When thus sent by their own doctor the Government pays the hospital for such care at public ward rates, *but they pay nothing whatever for medical services rendered to such a patient while in the Hospital.*

If an immigrant leaves the hall even within a day or two after arrival, the department claims that it is no longer responsible for him. Frequently it happens that such a case takes ill before he is in a position to support himself; consequently he finds his way to the hospital, and practically always to the public ward. Who pays for him? If a sick person has been in the city of Winnipeg for ten days, the city is required by provincial statute to pay for him, but the city does not receive any reimbursement for his hospital care.

On the other hand, if an immigrant family applies to the Social Welfare Commission of the city of Winnipeg for relief, and an investigation shows that they are liable to become permanent public charges, then such families are referred to the Immigration Department. In 1924, 81 such families were referred, and in 1926, 53. Of the 53 families, 10 had been in Canada less than a year. Thus the Immigration Commissioner is forced to support these people till he disposes of them by deportation or otherwise.

Let us then consider the problem of deportations. Immigrants can be deported during the first five years of their residence in Canada, providing steps for deportations have been initiated during the first two years, but probably most of them are deported during the early part of the second year of residence.

For the fiscal year ending March 31, 1926, there were 1,716 deportations from Canada, of which 410, or approximately 25 per cent, were deported for medical causes. Of the total deportations, 499 were from the three prairie provinces. The deportations via Winnipeg for medical causes would therefore number approximately 125. This means a considerable amount of illness over and above the illness of those actually coming in, probably as much or more. So that there was, even at the small total of immigration of 96,064 in 1926, an approximate total of over 2,000 days illness amongst the immigrants and deportees in the Winnipeg immigration halls alone.

That this does not include the illness of immigrants outside the halls but in the country less than one year is shown by the fact that the Winnipeg General Hospital alone gave public ward care and treatment to 66 such patients for 1,272 days during a period of five months only, from September to January last.

These statistics from the report of the Department of Immigration for the fiscal year ended March 31, 1926, and the deductions made from them show that in Winnipeg the problem of caring for the sick immigrant is a burden on the medical profession, on the hospitals and on the city.

This contention is further substantiated by the expression of the medical profession of Winnipeg as shown in the following resolutions:—

This resolution was unanimously passed at the regular meeting of physicians in attendance at the Winnipeg General Hospital, March 17, 1927:—

Whereas the hospital treatment and the medical care in hospitals of immigrant patients should be the responsibility of the Federal Government,

And whereas the present arrangement is most indefinite and throws the financial onus of caring for these patients on the hospitals and the medical profession of Winnipeg,

Be it therefore resolved that the Group in attendance at the Winnipeg General Hospital places itself on record as opposing the present arrangement for providing medical and hospital relief for immigrants,

And asks that the Federal Government, under whose auspices these patients enter the country, should be required, through its Department of Immigration, to be fully responsible for them until established,

And that the hospitals designated as "Immigrant Stations" should be paid for the care of immigrant patients on a cost basis at least.

Resolution of the Winnipeg Medical Society adopted unanimously at the regular meeting on the 18th of March, 1927:—

Whereas the code of ethics of the Canadian Medical Association states that "physicians give their services free more generally and more generously than is usual in any other profession, but justice requires that some limit should be applied to such free service."

And whereas in his private practice the doctor retains and exercises the right to decide to whom he will render free service, but, in his public practice as a member of an honorary attending staff of an hospital, he is unable to exercise this right; and, since the free service he renders as a staff doctor, is rendered on behalf of the profession to the community served by the institution concerned, and is rightly regarded as a contribution of the profession to the cause of charity in that community, it follows that the right to determine to whom the free service of honorary attending staffs shall be given, passes from the individual doctor to the whole profession.

And whereas owing to default on the part of the profession to provide machinery for this purpose, the executives of hospitals have undertaken the task of deciding to whom the profession shall render free service, and in the performance of this task, two of the hospitals in Manitoba (the Winnipeg General and St. Boniface), have, without consulting the profession in any way, admitted for gratuitous services people not rightly classed as indigents, to wit, immigrants less than one year in Canada, and Indians, both dependents of the Federal Government.

And whereas this question is to come before the Conference of Medical Services in Canada, meeting at Ottawa for discussion.

Therefore be it resolved that this society calls the attention of the executives of the Conference of Medical Services in Canada and of the Canadian Medical Association to this abuse of gratuitous professional service and requests that they devise means by which the benevolence of the profession may be protected from further exploitation.

From these resolutions it is apparent to all that the physicians of Winnipeg consider that the Federal Government is responsible for the care of immigrant patients, that they should pay for the hospital care of all such patients at a basis not less than cost, and that they should pay also for medical service required.

This is a proposition eminently fair and just. Why should the government expect any member of the medical profession to give his services to the Government free any more than they should expect members of the legal or engineering professions to do so? Approximately 60 per cent of the cost of immigration is spent in bringing the immigrants to this land, while 40 per cent is spent on the colonization side of the scheme. If these figures were reversed, and the settlers properly looked after and the services given them properly paid for, there would, no doubt, be more satisfactory results all round, and especially so in the matter of preventing such a serious out-going of our people as we have had the last few years.

There is another medical aspect of immigration to which I wish to refer briefly. It is said that medical inspection on landing is very superficial for the reason that the Department of Immigration has not arranged for sufficient time being given between the docking of the boat and the departure of the trains for a thorough examination. A glance at an immigrant as he walks down the gangplank, or a two-minute examination of a suspicious case, with a whole boat-load to be covered in an hour or less, can scarcely be called satisfactory. Our system of examination is too much like that of Ellis Island, where, so I have read, the medical examiners pass an immigrant every eight seconds. Although there is a countrywide demand for a thorough medical inspection of immigrants at the port of landing, the actuality appears to be only a makeshift.

For the fiscal year 1925-26, out of our total immigration, 75,397 came in by Atlantic ocean ports. Of this number only 244 were rejected and only 40 of these were rejected for medical causes. That is, only 1 out of every 1,900 immigrants was rejected for medical reasons.

As a result, trachoma, tuberculosis, etc., are scattered through our country, our hospitals are burdened with the newly arrived immigrants, our sanatoria with newly arrived but far advanced cases of tuberculosis, and our asylums with cases of dementia, etc., some of which had been in institutions for such in other countries.

Surely we should expect at least as thorough a medical inspection of immigrants as is made of children in schools—5 to 10 minutes to each, with a more thorough examination in suspicious cases. All immigrants should be detained long enough for a complete examination of all on the boat to be made.

There is yet a fourth phase of this question which should be discussed. Though it is a problem in itself and requires much consideration, I can only take time now to barely mention it. The problem is that of the medical examination of intending immigrants prior to embarkation. A thorough system of such inspection should be established as a government service and the medical officers appointed should be Canadians trained especially for that purpose. Preferably, this work should be done by the Federal Department of Health; and the Department of Immigration should accept no individuals or groups who have been rejected by these medical examiners.

One cannot help but conclude that every dollar spent in a thorough medical examination of immigrants, whether before embarkation or on entry, and the rejection of all medically unfit, would mean the saving of five to ten or twenty dollars to the hospitals, the municipalities, the provincial governments and even to the Federal Government, which is now spent on the medical care of these patients over and above the gratuitous service given.

SUMMARY

1. The Federal Government should, as early as can be done, establish a system of medical examination of intending immigrants prior to embarkation, and the officers employed should be Canadians especially trained for this purpose and under the charge of the Department of Health; or

2. A thorough and efficient medical examination should be made at the port of landing. More time should be allotted for such and the physical tests should be more rigid than in the past. The Federal Government should provide sufficient funds for this purpose.

3. Colonization of settlers as distinguished from mere immigration should be more and more emphasized, and in connection with this, arrangements should be made for available medical service for settlers in every district.

4. The Federal Government should pay for the hospital care of immigrant patients on the basis of cost, at least, especially for all patients who have been in the country less than a year, and should also pay for the medical or surgical services required for such patients.

5. The Federal Government might well be expected to consult with the Canadian Medical Association and consider its views in reference to the medical aspects of immigration.

RESOLUTION

Whereas there is now no system of medical examination of immigrants prior to embarkation;

And whereas the present system of medical examination of immigrants at the port of landing is entirely inadequate to the needs of the problem and thus results in a great menace to the health of every community in which these immigrants settle and in a great burden to the whole country financially;

And whereas the Federal Government has also failed to make provision for the payment of members of the medical profession and hospitals for the care of immigrants who are ill on arrival or within the first year of their settlement in the country;

Therefore be it resolved: That the Executive of the Canadian Medical Association be asked to take immediate steps to seek a conference with the Federal Government at an early date to discuss the medical aspects of immigration and to urge that plans be made as soon as possible for the extension of medical examination and medical care of immigrants along the lines suggested.

The CHAIRMAN: Is there any discussion on this important paper? It will be published in the proceedings of the conference. A resolution has already been considered by the conference, and this will come before the Council of the Canadian Medical Association for consideration.

Dr. M. M. SEYMOUR: As a member of the Dominion Council of Health, I should like to mention that steps have been taken by that council in connection with the medical inspection of immigrants for a thorough inspection in the old country towards removing the difficulties which at present exist. A resolution from this body helps materially in having that done.

The CHAIRMAN: I shall now ask Colonel Biggar to address us on

RED CROSS WORK IN CANADA

Dr. J. L. BIGGAR (Canadian Red Cross Society): Mr. President and gentlemen, after the interesting, valuable, and instructive addresses to which you have had the pleasure of listening during the last three days, I feel it is an imposition upon you to be asked to remain for even a few minutes in order to let me say something about the work in which I am so greatly interested. I feel a great deal of diffidence in appearing thus before this conference, because I have neither the knowledge nor the wisdom that the other speakers have demonstrated, but without in any way detracting from or minimizing the importance of the professional and the technical points of view, I think you will agree with me that advances in all forms of human activity are completely conditional upon the willingness of the human animal to be advanced. We have in the ranks of the medical profession in this country men and women of knowledge, experience, capacity, and energy, of the type that Dr. Vincent might choose for his so-called "medical Mussolini." If these people were gathered together and their powers were combined and made available, they could undoubtedly revolutionize health matters in Canada; but, unfortunately, this is not being done. I think it has been established beyond any doubt within the last six months that our people are not the kind that can be dragooned, legislated or driven into any course of conduct for which they are not themselves ready to embark. On that basis I submit for your consideration that there is scope in this country for a voluntary or lay organization which is gradually, but I hope sanely, informing itself concerning what these experienced and capable people have done and are doing and can do, or, in other words, that there is an advantage in having an increasing group of people who are learning to appreciate what increase in knowledge means to them individually and in their communities, and are being encouraged in every possible way to make use of that knowledge. Unquestionably, to-day there is knowledge enough in this country, as in other countries, to eliminate almost all preventable diseases, if and when the people are ready to have them eliminated. I do not think that needs any argument at all. I venture to say that, if we gave Dr. Amyot full power to act, within five or ten years we would have a negligible amount of tuberculosis, typhoid fever, diphtheria, measles, scarlet fever, whooping cough and other preventable infectious diseases. All we have to do is to *want* to get rid of them. Is that statement revolutionary? Wherever the law is enforced with regard to these diseases, they very largely disappear. We hardly need more than the complete application and enforcement of the present quarantine laws to protect us but without a very much larger measure of popular support than these laws have to-day, we will continue to have the epidemics and recurrences with which we are all familiar.

I have frequently said that typhoid fever is a vanishing disease; I regret I cannot say that to-day in view of the present epidemic in our midst. But speaking rather as a layman than a practising physician, I submit that in order to bring this improvement about, we need to have a large body of public opinion behind us, and we must secure the goodwill, endorsation and support of the people themselves for these rules and regulations so necessary for their protection.

You have got to have that before you can do what you want, and even if the Red Cross had only one excuse for existence, it is this, that it is using its every endeavour, its best knowledge and capacity, to understand and to popularize a truly honest, scientific, health conscience among the people at large.

The Red Cross has been doing a very extensive work that is extraordinarily little known. It has been astonishing to me, since I had the honour of assuming my present position, to find that so much excellent work has been done all across this country, so much money has been spent, and so little is generally known about it. I want you to go home with more knowledge. Let me tell you a little about some of the things your fellow-citizens in the Red Cross Society are doing.

There are six or seven really important services that the Red Cross has been privileged to render throughout Canada. Perhaps the greatest of these is its work amongst children. Middle-aged people, like your president and myself and other contemporaries of ours, are no longer persuadable. We have our bad habits and we do not propose to change them unless we are compelled to. But there was a time in our lives when we might perhaps have been educated into better, more useful, more healthful habits, and by introducing Junior Red Cross into schools in Canada, introducing it with the approval of all educational authorities in every province, we have succeeded in getting an increasingly large number of children, in the most formative period of their lives, to adopt with real enthusiasm some ten or twelve simple rules of health which have been of the utmost benefit to them.

The medical inspection of schools has established beyond any doubt that the ratio of cases of malnutrition in the schools on this continent is approximately 30 per cent. The causes of this condition are many and varied. They need not be discussed at this juncture. But the story of Mr. Hoover's discovery in his own home city of San Francisco, after his return from having fed some six million under-nourished children in Europe following the Great War—a discovery of the fact that the percentage of cases of malnutrition in San Francisco was forty-three, whereas in Vienna, after four and a half years of war, it was forty-two—was somewhat startling to our civilization. I asked myself, and I asked others who know much more of these conditions, "Is the medical profession responsible?" I do not know; I am perfectly willing to take the responsibility as much myself as to attribute it to anybody else.

Now, by following the perfectly simple rules of health—drinking milk, refraining from tea and coffee, going to bed early, keeping bedroom windows open at night, eating vegetables and fruit, washing one's hands carefully; by following these simple rules we have found as the result of observing groups of Junior Red Cross members that the percentage of under-nourished children is reduced from this average of thirty down to what is apparently an irreducible minimum of five or six per cent. That is one real accomplishment to which we point with pride.

We have done something else that I think is valuable and is worth boasting about. There is not a man who practised medicine in the rural districts of Canada some twenty years ago or more but was amazed at the lack of knowledge among his patients of the little things that have to do with the ordinary home care of the sick. How many of us have had to show the woman of the house, or the neighbour who is in attendance, how to change a dirty sheet, take a temperature, and so on—the things that any intelligent person ought to be able to do; little things that make a tremendous lot of difference to the patient. To meet that situation another form of Red Cross work has been organized in nearly all of the provinces. Some provinces have taken it up more enthusiastically than others. We have what we call classes in home nursing where students can get training that will enable them to act as home nurses. They are provided with information of the utmost value to themselves and their families in the way of the early recognition of disease, the necessity

of medical attention, the simple care of those who are sick, the advantage of a balanced diet, and so on. Some twelve thousand women have been so instructed in the three and a half years since these classes were started.

I almost forgot to say that these classes in home nursing have been possible because of the splendid co-operation of the registered nurses in Canada who have voluntarily given their services. In a great many of the classes, I should say the vast majority of them, medical men have given a certain amount of instruction on those subjects in which it is particularly proper they should give instruction. And in the general guidance of the affairs of the Red Cross Society the best possible medical advice has always been secured.

I scarcely need refer before this conference to the attitude the Canadian Red Cross Society has taken in respect of all other organizations working toward the same end. The Canadian Red Cross Society was in a very fortunate position at the end of the war for it had a good deal of money in its treasury. It has, however, during the years that have since intervened, expended most of those funds in providing these and a number of other services. As a part of that expenditure it did one thing that should appeal to the medical profession in Canada. It is one to which I am very proud to refer to whenever I have opportunity of speaking to medical men, and it is that there are to-day six universities in Canada where public health nursing is being taught as a special course. In 1919 there were no such courses available. The money and the energy that were necessary for the origination and establishment of those six courses was found by the Canadian Red Cross Society. How better could that money have been spent for the welfare of the people of Canada? That is only one example of the sort of thing we are doing.

That there is a very great need for the spread of knowledge and ample room for all forms of its dissemination, no one will deny. In this connection I should like to tell you of an experience I had some years ago when I was practising in a rural district. I was called to see a child some 12 to 15 months old who was very acutely ill. I enquired as to the child's immediate previous nourishment, and after some cross examination of the grandmother, who was the lady in charge of the situation, the mother being quite incidental to the discussion that went on, I learned that the meal that was probably responsible for the child's condition was yesterday's dinner, which had consisted almost entirely of a large quantity of boiled potatoes. Before I went very far with my objections I asked what else the child had had, and it turned out that the father had been giving it small mouthfuls of pork and tastes of pickles, and that it was not unaccustomed to having porridge and pie. I said, "Do you know that, speaking broadly, for little babies of the age of this baby, every article of food that begins with "p" is undesirable, such as, potatoes, pork, pickles, porridge, pie, pastry, and so on." The grandmother looked at me and said, "Young man, do you mean to tell me that potatoes are bad for children?" I said, "Yes." She said, "Well, I have raised 13 children and buried 6, and I know potatoes are good for them!"....

There are a good many people in Canada who have "raised 13 and buried 6" who claim to *know* this; and I submit for your consideration, gentlemen, that an agency that is striving in every possible way to enlighten that darkness has, perhaps, some justification for suggesting that it is not entirely unworthy of the endorsation and support of the most important class in the whole of our social organization, the medical profession.

May I stress for one moment this fact, that the Canadian Red Cross Society cannot succeed in doing what it desires to do unless it has the advice, the assistance, the co-operation, and the endorsement of the national leaders in any movement in health. It cannot do anything without them. Is it not justified, on its record, in asking the medical profession for such an endorsement, for such assistance, and for such advice.

I believe, and I should like to suggest to you, that without a broad endorsement of the ideals that animate the medical profession, we in the Red Cross cannot get very far with the public; that in order to obtain popular support, voluntary organizations must appeal to the medical profession for advice, assistance, and endorsation; and that every medical man who has the welfare of his community at heart, should be an active Red Cross worker. He could bring about co-operation and fix, if I may so express it, and direct that desire for service for the wellbeing of the country and the nation, which is felt by the great majority of the people of Canada, guiding them in those efforts that ultimately make for so much health, happiness and prosperity.

The CHAIRMAN: I am sure we are all glad, even at the eleventh hour, to have given Dr. Biggar a place on the program. I am sorry there has not been time for discussion on these papers. We have now before us some further resolutions for consideration.

Resolutions Nos. 8, 9 and 10, were then submitted and carried. (See Appendix.)

Dr. POOLE then moved a vote of thanks to the chairman.

Dr. ROUTLEY: Mr. Chairman, I have to declare that by the applause which you have just heard, Dr. Poole's motion regarding yourself is unanimously carried.

The CHAIRMAN: It is gratifying to me to have this expression of appreciation from my colleagues, and I wish to thank the mover and the seconder, and also the members of the conference in general for their very kind motion. In doing so I wish to explain that it is not your Chairman, but the man behind the gun, Dr. Routley, who is responsible for the success of this conference.

If there is no other business, ladies and gentlemen, I declare the conference adjourned.

This concluded the proceedings.

APPENDIX

RESOLUTION No. 1

That this Conference of the Medical Services in Canada recommends that the feasibility of holding a Conjoint Examination between the Medical Council of Canada, the Provincial Medical Councils or Boards and the Canadian Universities be given consideration by each of the bodies concerned.

That a copy of this resolution and a copy of the following proposed method of conducting a Conjoint Examination be forwarded to each of the bodies concerned.

The following is a proposed method of conducting a Conjoint Examination:

A Provincial Medical Council or Board or a Canadian university desirous of taking part in a Conjoint Examination with the Medical Council of Canada shall make application to this body some months before the meeting of the Medical Council of Canada at which the Board of Examiners is appointed.

The Medical Council of Canada, having approved of the application, shall request the Provincial Medical Council (or Board) or the university to submit nominations for examiners in each of the subjects of its examination.

The Medical Council of Canada shall appoint the Board of Examiners for the Conjoint Examination, selecting a certain portion of the Board from the nominations of the Provincial Board and a certain portion from the nominations of the university.

The conduct of the examination shall be carried out by co-operation between the Registrar of the Medical Council of Canada, the Registrar of the Provincial Medical Council concerned and the Registrar of the Faculty of Medicine of the university concerned.

The results of this Conjoint Examination as determined by the Board of Examiners shall be forwarded to each of the participating bodies.

The university concerned, after passing upon their candidates, shall forward the names of the successful candidates upon whom their degree will be conferred to the Provincial Medical Council or Board and to the Medical Council of Canada.

The Provincial Medical Council or Board concerned, after passing upon the successful university candidates, shall forward the names of those approved by their Council or Board to the Registrar of the Medical Council of Canada.

The Medical Council of Canada shall consider the results of the Conjoint Examining Board and the names of those candidates which have been approved by the Provincial Medical Council or Board and of those who have received their university degree and shall confer upon the successful candidates the licentiate of the Medical Council of Canada.—*Carried.*

RESOLUTION No. 2

That this conference extend to Dr. King, the Honourable the Minister of Health, our unanimous thanks for his courtesy and kindness in granting his patronage to this conference and for the splendid arrangements made for the holding of the conference in the House of Commons.—*Carried.*

RESOLUTION No. 3

That a hearty vote of thanks of this conference be extended to all who have contributed to the program and thereby to the success of this meeting—*Carried.*

RESOLUTION No. 4

That, in the opinion of this conference, the meetings of the Medical Services in Canada under the patronage of the Minister of Health have been of great value, and this conference would recommend that these meetings be perpetuated at intervals to be decided upon by the Canadian Medical Association. —*Carried.*

RESOLUTION No. 5

That this conference express, by resolution, its appreciation of the splendid services rendered the conference by our chairman, Dr. Primrose.—*Carried.*

RESOLUTION No. 6

That, in the opinion of this meeting, it is desirable that a conference of the Canadian Nurses' Association, the Association of French Physicians and Surgeons, the Canadian Medical Association, and the various Provincial Hospital Associations, be convened under the aegis of the Canadian Medical Association at a date to be subsequently fixed; this conference to undertake to arrange for a study of all problems that mutually affect, in any way, the parties to the Conference.—*Carried.*

RESOLUTION No. 7

That this Conference of the Medical Services in Canada recommends:—

1. That the action of the Canadian Medical Association in organizing and popularising periodic health examination be approved;
2. That the Canadian Medical Association organize a division to further public health education.—*Carried.*

RESOLUTION No. 8

That this conference approve of the principle of the exchange of teachers between the several Canadian medical schools and that this resolution be submitted to the respective governing bodies for their consideration.—*Carried.*

RESOLUTION No. 9

Whereas, both treaty and non-treaty Indians are wards of the Federal Government:

Whereas, the Department of Indian Affairs has stated that—

"In hospitals in the larger cities arrangements exist whereby payment by the department of public ward charges covers not only hospital care, but also the services of the physician or surgeon who takes charge of the case;

"And whereas, the above policy of the Department of Indian Affairs entails absolutely free services on the part of the physician or surgeon in charge of the case."

Therefore be it resolved: That this Conference on the Medical Services in Canada does hereby declare that it is opposed to the principle of the free treatment of Indians in our hospitals by the members of the staffs of the said hospitals; and, further,

That the Executive Committee of the Canadian Medical Association be asked to take up with the Department of Indian Affairs, at an early date, the question of fair remuneration for all medical and surgical work done for Indians in any ward of our hospitals.—*Carried.*

RESOLUTION No. 10

Whereas, there is now no system of medical examination of immigrants prior to embarkation;

And whereas, the present system of medical examination of immigrants at the port of landing is entirely inadequate to the needs of the problem and thus results in a great menace to the health of every community in which these immigrants settle and in a great burden to the whole country financially;

And whereas, at the present time no systematic plan exists for the provision of easily available medical service to the settlers in every district of our province;

And whereas, the Federal Government has also failed to make provision for the payment of members of the medical profession and hospitals for the care of immigrants who are ill on arrival or within the first year of their settlement in the country.

Therefore be it resolved: That the Executive of the Canadian Medical Association be asked to take immediate steps to seek a conference with the Federal Government at an early date to discuss the medical aspects of immigration as mentioned in the preamble hereto and to urge that plans be made as soon as possible for the extension of medical examination and medical care of immigrants along the lines suggested.—*Carried.*