Dominion Medical Monthly

And Ontario Medical Journal

Vol. XLVI. TORONTO, FEBRUARY, 1916 No. 2

Original Articles

THE MEDICAL COMMISSION

THE MEDICAL PROFESSION OF ONTARIO VERSUS THE IRREGULAR PRACTITIONER

The following is the statement made by Dr. H. B. Anderson, President of the Ontario Medical Association, before the Medical Commission under the Honorable Mr. Justice F. E. Hodgins:

Your Lordship:

The Ontario Medical Association was organized in 1880. Its ordinary membership consists of regularly qualified medical practitioners in good standing, resident in the Province, or those engaged in teaching or research work in medicine or the allied sciences, in the Province of Ontario. It is the Ontario Branch of the Canadian Medical Association. The present membership is about one thousand, and includes the leading practitioners of the Province.

Article 3 of the Constitution of the Ontario Branch of the Canadian Medical Association reads:

"Objects of the Association:

"1. The cultivation of the science of medicine and surgery.

"2. The advancement of the character and honor of the medical profession.

"3. The elevation of the standard of medical education.

"4. The promotion of public health.

"5. The furtherance of unity and harmony among its members.

"6. To form the connecting link between the members of the profession of the Province and the Canadian Medical Association, in accordance with Article 4 of the Constitution of the Canadian Medical Association."

At the outset, may I direct attention to the fact that the legislation passed from time to time to regulate medical practice in

Upper Canada, afterwards the Province of Ontario, culminating in the laws under which we are now governed, was for the purpose of affording protection to the individual and the community from unskilled, ignorant medical practitioners and quacks, by whom the country was overrun at an early period in the history of the Province. So much was this the case that there was a public outcry and demand for protective legislation. To substantiate these statements, may I submit the following:

"The Medical Profession in Upper Canada, Canniff, p. 26—Extract from an article contributed by the late Bishop Strachan, 1812:

"The Province is overrun with self-made physicians who have no pretensions to knowledge of any kind, and yet there is no profession that requires more extensive information. They comprehend not the causes or nature of disease, are totally ignorant of anatomy, chemistry and botany; many know nothing of classical learning or general science. Where shall you find *one* among them attending particularly to the age, constitution and circumstances of the patient, and varying his prescriptions accordingly. It is indeed preposterous to expect judgment and skill, a nice discrimination of diseases, or a proper method of cure from men who have never been regularly taught, who cannot pronounce, much less explain, the terms of the art they profess, and who are unable to read the books written upon the subject. The welfare of the people calls aloud for some legislative provision that shall remedy this increasing evil; and examination, however slight, would terrify nine-tenths of the present race."

A type of practitioner commonly found at this period is exemplified by the following extracts:

"Richmond, October 17, 1817—Advertisement—This is to certify that I, Solomon Albert, is Good to cure any sore, or any Complaint or any Pains, Rheumaticks Pains, or any Complaint what so ever the subscriber doctors with yerbs or Roots. Any person wishing to employ him will find him at Dick Bells. (Signed) Solomon Albert.

Page 28—"That illiterate and incompetent persons found their way into Upper Canada during the first fifteen years of this century may be gathered from letters which appeared in the Kingston *Gazette*. In the *Gazette* of June 2nd, 1812, is a letter from Gananoque, signed 'Candidus,' giving a copy of an account sent to Mrs. John Gould by a 'self-taught physician of this province'— 'The estate of Mrs. J. Gould Dr. To dr. for medsin and attendants whene he was choked with a large peas of butter no meat £3. A second letter, signed 'Credulus' refers to 'certain medical gentlemen who have out of pure charity come into this country from the neighbouring States to cure us of all our maladies.' They do not use opium, or calomel, but charms. He gives an account of the treatment of a tumour by stroking and using certain words to drive away 'the devil's swelling.' A third letter is about a shoemaker who went where unknown to practise and who being called to see a case of dropsy pronounced it pleurisy, and declared that 'fleglottomy' was demanded to reduce the body to natural size; but on being exposed took a hasty departure.

"A fourth letter refers to a bill sent in by a doctor, with a deduction of £6 for 'killing your son.' This was because the doctor had carried the smallpox to the son, who died of it.

"The following is an indication that at Kingston in 1815 the more intelligent public saw the necessity of protection against incompetent men. The Kingston *Gazette* contains the following:

"'To the public. *Facilis descensus Averni.* The Parliament of the Province, during the last session, provided in part against the imposition of empirics in medicine. This was not more necessary for the safety of the diseased than the reputation of the faculty.' Then follows an earnest appeal to the public and Parliament against quacks, their danger 'without one ray of science' who 'presume to thrust the created into the presence of the Creator.' Signed 'W.' (Not of the profession he says.)"

It was not a question of conferring unusual privileges on a body of medical men for their own benefit, or of creating a monopoly, but of giving them power to ensure to the people of the Province the services of well-educated, properly trained practitioners to attend them in sickness. We believe it, therefore, of much importance that there be a clear understanding of the chaotic and unsatisfactory condition of medical practice which gave rise to the public clamor for protection, and which resulted eventually in the establishment of the College of Physicians and Surgeons of Ontario.

The Ontario Medical Association believes that the College of Physicians and Surgeons, our universities and other organizations having control of the education and licensing of medical practitioners, have honorably and fairly discharged their duties in the public interest. The doors of the profession always have been and now are open for the admission of any who comply with the common regulations regarding education, training and examinations. In no sense of the word may the profession of medicine in Ontario be considered a close corporation.

The Ontario Medical Association holds that every person before being legally entitled to treat the sick should comply with the same educational conditions; whatever the system of treatment may be, it can be most intelligently carried out by one who is properly educated. This applies alike to preliminary as well as to scientific or professional education.

To understand disease and treat it intelligently necessitates a knowledge of the structure and functions of the body in health, as well as of the various conditions acting upon the body to produce change or derangement of these structures or functions—that is, disease. To be able to understand and treat disease intelligently, therefore, requires a proper training in anatomy, and physiology, by which we learn normal structure and function; in pathology, anatomy and pathological chemistry, by which we learn of the changes in structure and function encountered in disease; in chemistry, physics and bacteriology, in order to understand the conditions acting upon the individual to produce disease, and to acquire information necessary to apply preventive measures, requisite alike

to ward off disease in the individual and to protect the public, as in the case of infectious disease.

A study of the signs, symptoms and course of different diseases is necessary in order to be able to recognize them and to diagnose or differentiate one disease from another. Hence, proper clinical training is a pre-requisite of *any intelligent plan of treatment,* as it is obviously impossible to apply treatment properly or with safety until one knows what the disease or condition is that he seeks to remedy. These principles of necessity apply with equal force to whatever the mode or system of treatment, which may be deemed most useful or advisable for the relief of the disease, when once it has been recognized.

It follows, therefore, that the same scientific and clinical training is a pre-requisite *for all forms of treatment.* The arbitrary belief in any special dogma, system or plan of treatment can in no way relieve one of the necessity for this training in the fundaments of intelligent practice. The irregular systems of practice do not claim a special form of anatomy, physiology, chemistry, physics or bacteriology. Once the would-be practitioner is properly trained and legally qualified, no restriction is, or should be placed on his freedom to obtain further knowledge in any form of treatment or of the right to practise it within legal and ethical limitations. This is recognized under the medical laws now in force in the Province. Only by the acceptance of these underlying principles are equal rights and privileges granted to all, the safety of the public protected and medical science promoted.

In the countries of Europe these principles are recognized as underlying every legalized form of practice. For the state to recognize the right of any to practise medicine without the knowledge to be acquired only by training in the before-mentioned subjects, is to expose not only the individual but the public to grave dangers. The inability to diagnose may allow a patient with a diseased spinal column to be manipulated, producing dislocation, crushing of the spinal cord, paralysis and death; a tuberculous joint may be manipulated and the disease disseminated; an aneurism may be ruptured; apoplexy produced in a patient with high blood pressure or death result from manipulation of a goitre. Massage, manipulation, mechanotherapy, hydrotherapy and other drugless forms of treatment, are recognized and practised as a part of general medicine and require for their safe application the same ability to diagnose and select the proper cases as with medicinal treatment.

The public health would be endangered from any inability, owing to defective training, to recognize diphtheria, typhoid, syphilis, or other infectious disease, which depend for their diagnosis on clinical training and the knowledge to apply modern laboratory methods.

In medico-legal cases and death certification, the inability to recognize the disease being treated or the cause of death would open the door to possibilities too obvious to require emphasis.

Life and accident insurance companies have interests which depend upon the ability to diagnose accurately and manage properly diseases and injuries.

Modern medicine is opposed to the recognition of any special dogma or exclusive theory of practice, because acceptance of such excludes the necessity for testing out these theories, and the careful investigation and weighing of facts upon which scientific knowledge and practice depend for their advancement. At the same time it recognizes and encourages the investigation of every form of treatment in so far as it is without danger to the individual or the community.

Provision has been made in the Provincial university and in other universities of the Province, at great expense to the public, to furnish proper education and scientific training, which are prerequisite to treatment. The privileges of these institutions are open to all who prepare themselves to take advantage of them.

We believe that the Government would stultify itself by expending large sums to equip and maintain institutions to provide proper scientific training, if illiterate, inferiorly educated or untrained persons were granted the right to practise.

The Ontario Medical Association, whose members have had to comply with the educational requirements of these institutions and to pass the examinations prescribed to qualify them to practise, is opposed to the admission to practise on different terms of the graduates of inferior proprietary institutions of a foreign country. We believe that all should enter by the same door. The report of the Carnegie Foundation (1910, p. 163-6) says of the osteopathic schools of the United States: "The eight osteopathic schools fairly reek with commercialism. Their catalogues are a mass of hysterical exaggerations alike of the earning and curative power of osteopathy." "It is impossible to say upon which score the 'science' most confidently appeals to the crude boys or disappointed men and women whom it successfully exploits. Standards those concerns have none, etc." These are the statements made after an exhaustive investigation by commissioners who were not medical men.

The members of our Association, in order to qualify themselves for specialized practice, have had to spend often many years in post-graduate study abroad to extend their knowledge. If those wishing to undertake other special forms of practice have to go elsewhere for training or to extend their knowledge, after graduation in the regular way, they have a similar right and opportunity to do so; and for this no special legislation is required.

May we also point out the claims which the body of regular practitioners have for asking consideration of their views by reason of the gratuitous medical services which they have always rendered the indigent, and their efforts in furthering preventive medicine and promoting the public health.

At the present time hundreds of the doctors of this Province are overseas in the service of their country, and many hundreds of those at home are caring for the needy dependants of our soldiers. We submit that at such a time and in the absence of many from the country it would be an act of injustice and ingratitude on the part of the Province to give legal status to any body of inferiorly trained persons to practise and thus to jeopardize their interests unnecessarily.

In the questions now at issue the Ontario Medical Association wishes to place itself on record as taking the broadest possible ground in the interests of the community for the advancement of the science and practice of medicine—preventive as well as curative —as well as for the safety of the sick and ailing. We seek only equal rights for all in upholding those principles which are essential alike for the safety of the sick and ailing, and for the promotion of medical knowledge and practice in all its branches, which principles in this Province were established primarily for the protection of the people from the dangers of incompetent medical practice and quackery.

THE ROYAL MEDICAL COMMISSION

PARLIAMENT BUILDINGS, TORONTO,
November 29th, 1915.

MR. H. S. OSLER, K.C.: The body that I have the honor to represent before the Commission is the College of Physicians and Surgeons of Ontario, which is the practising medical profession, incorporated by the Legislature of this Province, the present Act of Incorporation being R.S.O. (1914), Chap. 161.

While the profession is incorporated in this way, the physicians who have the right to practise and who are so incorporated have no activities whatever within the College beyond the right to vote at stated periods for the election of the Council, so that technically, while the Council is separate from the College, of which it is nominally the governing body, in fact the Council of the College is the College itself to a greater extent than the directorate of an ordinary corporation.

I am here this morning simply to present the position of the College before the Commission, and I do not regard as within the scope of my remarks any controversial matters, and if any contention should arise in any way I would ask leave to appear again upon the subject in such a way as you may think fit to direct.

Now in so far as it seemed to me to be useful I have noted a reference to the legislation which has from time to time in this Province, and in the late Province of Canada, and the Province of Upper Canada, been in force regarding the medical profession.

The earliest legislation which may be usefully referred to is to be found in the Revised Statutes of Upper Canada, 59 George III., Chap 13 (1818), entitled an "Act to License Practitioners in Physics and Surgery throughout this Province."

By this Act a Medical Board was constituted of five or more persons, legally authorized to practise, such Board to be appointed by the Lieutenant-Governor, and to examine all persons applying for a license to practise, the Lieutenant-Governor to issue such license on certificate of the Board.

This legislation was re-enacted in substantially the same terms by Chapter 40 of the Consolidated Statutes of Upper Canada (1859), Section 1. I pass over all amending Acts in the interval.

The examining powers of the Board were continued, but by Section 8 it was provided that upon proof of identity the Governor might issue a license to any person exhibiting a diploma or license as physician or surgeon from any university in Her Majesty's Dominions, or from the Royal College of Physicians or of Surgeons in London, or a commission or warrant as physician or surgeon in Her Majesty's Naval or Military Services.

In 1865 the Medical Act for Upper Canada was passed, 29 Victoria, Chapter 34. Prior legislation was repealed, and a Council was established in the name of the General Council of Medical Education and Registration of Upper Canada. This Act is marked by an absolute change of policy. The Medical Board is abolished, and no examining powers are conferred upon the Council, which

consists of representatives from every teaching body and of twelve elected representatives of registered practitioners.

By Section 17 power is conferred on the Council to fix and determine the curriculum to be observed and taught by all the colleges represented, and it is provided by Section 18 that if any college shall not observe or follow such curriculum and shall not properly maintain the desired standard, steps may be taken to disentitle the holders of degrees of such college to registration.

By Section 13 and Schedule "A" therein referred to the right of registration is conferred upon all existing practitioners, all holders of certificates issued by any of the colleges represented on the Council, all holders of degrees from any university in Her Majesty's dominions, or from the Royal College of Physicians and of Surgeons in London, all persons registered under the Imperial Medical Act, and all holders of commissions in Her Majesty's Service.

There is nothing upon the face of this Act of 1865 to show why this change of policy was brought about. I am informed, however, that the reason for it was that the Medical Board that had been in force from 1818, and even before that date, had in fact no real working examinations, but assumed merely to register the degrees of universities, and was therefore not in reality an examining board.

Your Lordship will understand that I am expressly avoiding any comment or argument in any way with regard to the policies of these Acts, because that is a matter now under discussion with the University of Toronto, and may come before you later, when we are both ready to deal with it. I am only for the moment going into the history of the legislation.

This Act of 1865 remained in force for four years, and I do not think I ought to touch upon any question as to how or why it was repealed, but the fact was that it was repealed in 1869.

In 1869 the Acts relating to the practice of medicine and surgery were consolidated by the Ontario Medical Act, 32 Victoria, Chapter 45 (Ontario). By this Act the medical profession of Ontario was incorporated as the College of Physicians and Surgeons of Ontario, and a Council of the College was established, composed of one representative from each college or teaching body and twenty-two members to be elected by the profession, including representatives of the homeopathic and eclectic schools.

By this Act the policy of registration of holders of degrees or diplomas of the teaching bodies was once again abandoned in favor of the system of examining candidates by a Board of Examiners

to be appointed or elected by the Council of the College, from the teaching bodies or colleges, and from the members of the college.

That system has remained in force until the present day, although the Act of 1869 was changed considerably in form, and the present Revised Statute of Ontario, Chap. 161, to which I referred in opening, was in substantially its present form first enacted in 1874 by 37 Victoria, Chapter 30. There have been a number of amendments to the Act from time to time; but its policy does not differ, so far as any matter is concerned which is likely to come before your Lordship, from the Act of 1874.

Now a most superficial examination of this legislation shows that the uniform policy of the Legislature has been to recognize the necessity for constituting the medical profession a corporation, conferring upon the profession certain powers, and imposing certain restrictions—no doubt rights and privileges are conferred upon them, but most severe conditions, having regard to the state of education in the Province in those days, were imposed upon them as regards the education required before the right of practising the art of healing for gain could be exercised within the Province.

Now it seems to me that it is absolutely necessary, at the outset of this inquiry, to consider the policy of the Legislature in passing this legislation. Is it to create and protect a monopoly, a close corporation having certain monopolistic rights and privileges, or is it to protect the public against imposition and incompetence on the part of those professing to exercise the art of healing and seeking to make a livelihood by so doing?

This appears to me, if I may with respect say so, to be the most important duty imposed upon your Lordship by this Commission, because upon the view you take of the policy and of the object of the Act must inevitably depend, as I see it, the view you will take upon the most important perhaps of all the controversies which will arise between the different interests and the parties who may appear before you.

It is unfortunate that one of the judges now sitting upon the Ontario Bench—and the only one, I believe—has taken the view that the Act is solely concerned with the formation of a close corporation with special and monopolistic privileges. That is a view which, on behalf of the medical profession, I absolutely and unqualifiedly repudiate. An individual physician, speaking for himself, and speaking from his own point of view, may very likely use language open to that interpretation, in speaking with reference to some local, unlicensed, unauthorized competitor, when his per-

sonal interests are in question. It is very difficult for a man who is engaged in practising his profession to avoid that point of view, but speaking for the profession at large, speaking officially as representing the College of Physicians and Surgeons, I say that the object of this Act is simply and solely to protect the public against incompetence and fraud, and that all provisions which, in themselves, are directed to upholding the dignity and prestige of a profession which is entitled to recognition, to respect, and to honor, are nevertheless enacted solely in the public interest and should be so construed and regarded.

Now, regarded in this light, the legislation perhaps hardly needs justification, but nevertheless it will not be without use if I point out, along the broadest possible lines, the reason why legislation of this character has been found to be absolutely necessary in all civilized countries. It may be said to be contrary to the trend of modern legislation to confer monopolistic privileges upon any man or body of men, and therefore if such legislation as your Lordship may think fit to recommend has in fact this result it must be justified upon broad grounds of public policy.

It is common knowledge—I need not go into details—it is absolutely common knowledge that the general public has no knowledge whatever of medical science. I have no doubt that probably you feel, as I feel, that we are not qualified even to judge the comparative qualifications of men holding themselves out as qualified to practise the healing art. That being the case, it probably follows from that fact alone, if it be accepted, that the general public, and in particular the uneducated portion of the general public, absolutely require protection by legislation which shall insure that a man who offers to heal—using that word in its widest sense—shall have at least a certain minimum qualification of education and experience.

Now it is also common knowledge—and the same conclusion follows *a fortiori* from the fact—that the more difficult, obscure and incurable any disease or ailment may be, the more the sufferer is likely to turn to absurd remedies, the more likely they are to believe in unscrupulous persons who do not for a moment hesitate to promise everything to them, with the result that they probably thereby not only receive no benefit, but are injured, to say nothing of the useless expenditure of money which properly belongs to those dependent upon them. I do not propose to go into the authorities on the subject in great detail, but I shall refer your Lordship to a number of cases which I think may be of use and interest to you, including some which have been decided in various courts of the

United States, to which I refer both on account of references which have been made before your Lordship to practices in the United States, and of these I have selected judgments the reasons of which will, I think, commend itself to your Lordship's judgment. I shall finish these very general remarks—which could be elaborated indefinitely—by reference to the language of the late Chief Justice Moss in 13 Ontario Law Reports, page 505, when he says, referring to the Ontario Medical Act, "It is a public Act in the fullest sense and not a merely private Act. Its early origin was due to an intelligent, wise and far-sighted apprehension by the regulation of the policy of protecting the public from the dangers and inconveniences arising from unskilful and unqualified persons assuming to protect as physicians and surgeons."

Now, speaking again in the most general way, and disregarding all matters of detail, the protection which the Legislature has in this way assumed to give to the public has been given essentially by one provision only, viz.: the requirement of a certain standard of education on the part of those practising the healing art. The identification of the persons who have attained that standard is provided by registration in what is usually referred to as the register of practitioners entitled to practise within the Province.

It has followed as a matter of course that numerous attempts to evade these restrictions have been made by persons desirous of making money by curing or attempting to cure or alleviate the various ailments from which people suffer. And, speaking generally, it may be said that the cases which have arisen may be divided into two classes. I am speaking, of course, of attempts made to evade the Act, contentions that the Act does not apply to the particular case which has arisen. I am not referring to plain bold violations of the Act, which we need not deal with here.

The first class consists of the so-called drugless system of healing, in which there has been avowed, more or less frankly, the attempt to diagnose the disease of the patient in question, and to prescribe a remedy, the contention being that because no medicine was used there could be no practising of medicine within the prohibition of the legislation. This class includes Christian Scientists, osteopaths, mano-therapists, chiropractors, and various other "systems" of healing which have been mentioned in this inquiry.

The second class—not less important as regards the policy of the Act—consists of those attempting to evade the Act upon the ground that the defendants were engaged in the business of vending patent medicines or drugs without attempting to diagnose the

disease or to prescribe a remedy, the theory being that the patient himself applied for, selected and bought the remedy in question.

This class may be sub-divided as follows:

Cases in which the defendants were locally known and supposed to be possessed of certain skill or experience, the questions raised being principally as to proof of diagnosis and prescription, the attempt to evade the Act being confined to evidence that there was no separate charge for advice, the fee paid being nominally the price of the medicine supplied.

Cases of organized attempts to evade the Act by obtaining from patients written statements of symptoms; and I must say that this class requires special attention in considering exactly what amendments there should be made to the Act. These organized attempts to evade the Act are characterized by written statements of symptoms, procured, for the most part, on printed forms, with the understanding and representation that they are to be forwarded to the advertising physician residing in the United States, from whom advice is to be subsequently received by mail by which the patients will be enabled to apply for the advertised remedies. In some cases elaborate series of questions are supplied on printed forms, which omit any reference to advice in the United States, but include directions which enable the patients themselves to select the remedies according to the answers given.

Then there is another sub-class which consists simply of attempts to inform patients suffering from disease, both by printed literature and by lectures, with the object of enabling persons suffering from various diseases to purchase remedies as advertised and orally recommended. A very well-known example of this class is the organization for the sale of "Viavi" remedies.

There is no objection to the lawful and proper vending of patent medicines, but the Act as it stands has not for a long time been regarded as satisfactory, in that it does not appear to contain sufficiently clear and effective provisions to enable the authorities successfully to deal with professed evasions of the Act. This, I may say, is one subject which came up for discussion when the College of Physicians and Surgeons, some years ago, asked for amendments to the Act, and is, therefore, one of the matters to which I wish to draw your Lordship's attention, and in doing so I do not wish to be regarded as attacking patent medicines, as such; they are lawfully sold by chemists; they are sometimes no doubt prescribed by physicians; sometimes no doubt people are attracted by advertisements in the newspapers to ask for them, and they purchase them. Of course, if a man chooses, relying upon

advertisements in the newspapers, and without taking the advice of a physician, to take the risk of experimenting upon himself, it is not my idea that I should ask your Lordship to consider whether he ought to be permitted to do so or not.

It does not seem to me that anyone desirous of evading the Act has any standing to discuss this matter in the way I put it. That is to say, I am only suggesting that there should be legislation which should put it beyond question that a man cannot deliberately evade the Act in any one of the three ways that I have mentioned. In other words, if only qualified persons, identified as the Legislature may choose to identify them, whether by registration or otherwise, are allowed to practise the art of healing in this Province, then persons ought not to be permitted to get patients into their offices and steer them, so to speak, into the purchase of certain remedies. Speaking purely from recollection of various cases, the idea is that a man is told that if he takes three months' treatment he will be cured. What is the three months' treatment? They are furnished with a certain bottle of medicine. They pay so much for it. They say, "This will last you for such and such a time," say for a month, and in a month they return and pay so much more and get another bottle; and thus men are steered into purchasing the remedy that the man desires to sell. There is no charge for advice, and the conversation is so conducted that the vendor of the medicine and the patient both are able themselves to give evidence to this effect before the magistrate afterwards. The purchaser of the medicine says, "Well, I came in to say what I wanted; he did not diagnose my trouble; he did not prescribe, but I bought the medicine." Of course, the cases to be reached are only cases where there is a deliberate attempt to evade the Act, and not where there is a bona fide going into a chemist's shop and buying medicine. That class is the least in importance of those three sub-heads of the second class which I have mentioned, because they are more easily dealt with. The more difficult and important class consists of doctors so-called advertising themselves as physicians of great skill, claiming to be able to cure all disease, not registered in Ontario, residing in the United States, but advertising here, and by correspondence and by the use of printed forms getting answers from a patient which then enables them to say, "Well, now, you ought to ask for certain remedies"—naming them, perhaps, and saying, "You ought to ask for Numbers 1 and 2," according to the answers given to the questions. Or in other cases, where they send an elaborate form—I have seen some of them—they say, "If you answer questions so and so and so and so in a certain way,

then what you will probably require is our remedy number so and so," and then the patient, having studied this form, goes to the place where the remedies are on sale and asks for what is wanted, and both sides take the position that they simply purchased and sold the remedy, whereas the net result of all that is done is a plain evasion of the Act.

Then the third class is even more difficult to deal with. They publish literature and essays upon certain diseases; they advertise lectures, and the whole object is to get patients suffering from these diseases to read the literature and attend the lectures, the idea being that by such a lecture the patient will know perfectly clearly what he ought to do, that the advice of the physician is of no importance, and that if he will only just understand what is the matter with him, and then go and get certain of these remedies he will be cured. In other words, my Lord, a plain attempt is made to appeal to the judgment of the uneducated public for a decision as to the remedy for the disease.

Without desiring to go at length into a question of controversy, I think the essence of it is based upon the answer which one man made to your Lordship. He said: "Our idea is that the public have a right to any treatment they want by the persons whom they want to give it to them." In other words, there is no necessity for an Act at all; let every man stand on his own merits and let every man take his chance.

THE COMMISSIONER: That is the fundamental difference?

MR. OSLER: Yes, my Lord; that is to touch it with the point of the needle; that is the very crux of the difficulty.

Now there are a great many cases that have been determined in our courts. I shall only refer your Lordship to those which I think will be useful or interesting for the purpose of this Commission. The first case is one that brings up the business of the chemist—Regina v. Howarth, 24 O. R., page 561. And in considering this matter your Lordship will bear in mind that the English cases practically give no assistance, at least not without a great deal of research and distinction, because in England apothecaries have the right to prescribe. Here there is nothing of that kind.

In this case a druggist undertook to diagnose and prescribe and was found guilty of practising medicine contrary to the provisions of the Act. The evidence was to the effect that the patient did not name his ailment, but described his symptoms and the defendant decided what the ailment was and sold and charged him for medicine.

This case of Regina v. Howarth is the leading case to which these people go who attempt to evade the Act in order to see just how far they can go, and how far they cannot go, in selling medicine.

Compare with that the case of the vendor of patent medicines—R. v. Coulson, 27 O. R., page 59. Here the defendant attempted to evade the Act by pleading that he was simply a vendor of patent medicines. He was, however, convicted of practising medicine on evidence that the patient stated the symptoms and left the vendor to choose the medicine.

In these two cases the door is left wide open for certain of the evasions of the Act I have mentioned.

Then we come to the cases which have been the foundation of the contentions of those who have appeared before your Lordship as the drugless physicians.

Let us consider for a moment the case of R. v. Stewart, 17 O. R., page 4. This is probably the most important, and I may say, I think, the most unfortunate decision of our courts upon the subject. It is the judgment of the Divisional Court, and under the practice the court of last resort in matters of this kind. In this case it was decided, in the most unqualified way, that the Ontario Medical Act was entirely confined to actual surgical operations and attempts to cure or alleviate disease by means of drugs or medicines, and left the door wide open for anybody, no matter how much or how little his education or qualification, to practise the art of healing by every imaginable means, so long as he did not actually prescribe or use drugs. I have every respect for that court, and for every member of it—the members of it are no longer here—but I must point out that the ridiculously inadequate definition of the practice of medicine which is held to be the meaning of those words in the Act was "to prescribe or demonstrate any substance which has, or is supposed to have, a property of curing or mitigating diseases." That, according to this decision, was what the Act was intended to apply to, and for many years this stood as the decision of the courts; and owing to that decision these drugless healers were able to pour into this Province in large numbers. Attempts were made to have the Act amended; these attempts failed, and a Commission was suggested. There was a long delay at first in considering the question as to whether this decision was right or not, and questions were finally submitted to the courts which were answered by the Court of Appeal for Ontario in the case which I have referred to a short time ago, in re Ontario Medical Act, 13 O.L.R., 501.

The majority of the court said that while they were not able to define the practice of medicine in any comprehensive way; they were of the opinion that it was not intended to be confined to cases in which medicines or drugs were used.

Then there are some Canadian cases of general interest.

I have classified them regardless of date, and these may be also usefully referred to.

There is the case of R. v. Valleau, 3 Can. Criminal Cases, 435. In this case it was held that diagnosis, followed by manual manipulation for the purpose of curing disease, was not practising medicine.

In the case of the College of Physicians and Surgeons of Quebec vs. Tucker, 17 Que. S. C., 70, it was held that the sale of a remedy to the person who asks for it for an illness with which he is afflicted, but without diagnosis by the vendor, is not practising medicine. These just by way of illustration, my Lord:

The case of Foster v. Rose, 37 O.L.J., 824, is the decision of the late County Judge Macdougall upon an interesting question, of which I ask your Lordship's consideration, without saying anything finally about it until controversial questions are dealt with.

In this case Judge Macdougall held that the use of the title "Dr.," either written out in full or abbreviated, without supplemental words indicating that the defendant was a registered physician, was not an offence against the Act.

I would ask your Lordship to compare with this case the recent case of Rex v. Harvey, 16 O.W.R., page 433. This is the case of an oculist. Mr. Justice Middleton there held that the Act relates only to the practice of medicine as understood in its primary and popular meaning. I am not at all sure that I agree with that—that is to say, speaking of the Act as it ought to be looked upon; but it is quite clear that the popular and primary meaning of the word "Doctor" is a physician. I think your Lordship will undoubtedly agree with me, that when you refer to a doctor you mean a physician. There are no doubt Doctors of Laws and Doctors of Divinity, but it is undoubtedly true that if a man can advertise himself as a doctor it leads to the use of the expressions "chiropractic doctor," "osteopathic doctor," etc., etc., so that anybody is a doctor who tries to heal anybody, and the result is undoubtedly deception and imposition upon the public.

All I am saying is that there should be some legislation on the subject, and that it should be an offence against the Act to advertise or use advertisements or signs upon which is the word "Doctor" by a man who is not by law authorized to practise something or to

use it in some way. Merely because a man holds himself out as a healer of some kind he should not be entitled to call himself "doctor," if he has no authorized right to do so.

THE COMMISSIONER: Well, what about men who call themselves osteopathic doctors and chiropractic doctors? That defines what they are, and apart from the question whether they have any right to use the word "doctor" or not, it would seem advisable that they should distinguish themselves.

MR. OSLER: Once their right is determined there is no reason why they should not have such proper title as that right may call for.

THE COMMISSIONER: At the present time, when their right is not defined or settled, it is better that they should call themselves by their correct name, and they use the word "doctor."

MR. OSLER: At the present time, if I understand the decision of the Court of Appeal in re Ontario Medical Act rightly, they are, each and every one of them, practising medicine unlawfully and in violation of the Act. What I mean is this, my Lord, that if a man holds himself out as competent to diagnose and to relieve by prescription of any kind, any ailment, he is practising medicine, as I understand the Act as it is now. The question is what provision should be made for the imposing and the maintaining of a standard of education upon those who purport to practise in this way before the public?

I should just like to refer for a moment to the case of R. vs. Couture. This is really a decision of the Province of Quebec. In that case the patient was a child, incompetent to describe his symptoms or to choose medicines, and an attempt to cure by hand passage or a so-called gift for healing was held to be practising medicine, although no drugs were used.

In the case of R. vs. Henderson, 1 L.W.N., page 543, it was held that the practice of osteopathy was not a violation of the Act. That is taking the same view of the Act as in the case of R. vs. Stewart.

Now I feel sure that your Lordship will find it useful to be referred to some of the principal cases that have been decided in the American courts, but it would first perhaps be useful to give your Lordship a few definitions of the phrase "Practice of Medicine."

The definition in Murray's Oxford Dictionary (undoubtedly the authoritative definition) is quoted in the judgment of Mr. Justice MacLaren, in 13 O.L.R.—which is probably the authoritative definition:

"That department of knowledge and practice which is concerned with the cure, alleviation and prevention of disease in human beings and with the restoration and preservation of health. Also in a more restricted sense applied to that branch of its department which is the province of the physician in the modern application of the term. The art of restoring and preserving the health of human beings by the administration of remedial substances and the regulation of diet, habits and conditions of life."

The Medical Act of the State of Michigan defines the practice of medicine to be:

"The actual diagnosing, curing, or relieving in any degree, or professing or attempting to diagnose, treat, cure or relieve any human disease, ailment, defect or complaint, whether of physical or mental origin by attendance or by advice, or by prescribing or furnishing any drug, medicine, appliance, manipulation or method, or by any therapeutic agent whatsoever."

In Webster's New International Dictionary medicine is defined as "The science and art of dealing with the prevention, cure or alleviation of disease."

The Century Dictionary defines it as: "The art of preventing, curing, or alleviating disease, and remedying as far as possible the results of violence and accident. Practical medicine is divided into medicine in a stricter sense, surgery and obstetrics. These rest largely on the sciences of anatomy and physiology, normal and physical, pharmacology and bacteriology, which, having practical relations almost exclusively with medicine, are called the medical sciences, and form distinct parts of that art."

It has been repeatedly held throughout the United States that what are known as drugless methods of healing involve the practice of medicine. I cite a few of the principal cases as follows:

People vs. Phippen, 70 Mich., 6.
Bragg vs. State, 58 L.R.A., 925.
Dent vs. W. Virginia, 129 U.S., 114.
Commonwealth vs. Jewelle, 85 N.E.R., 858 (Mass.).
People vs. Gordon, 62 N.E.R., 858 (Ill.).
State vs. Gravette, 62 N.E.R., 325 (Ill.).
State vs. Marble, 70 L.R.A., 835 (Ohio).
Commonwealth vs. St. Pierre, 175 Mass., 48.
People vs. Alcutt, 102 N.Y. Supp., 678.
Bandel vs. Dept. of Health, 193 N.Y., 133.
State vs. Heath, 125 Ia., 585; 101 N.W., 429.
State vs. Adkins, 124 N.W., 627 (Ia.).
State vs. Wilhite, 132 Ia., 226; 11 A. & E. Ann. Cases, 180.

State vs. Yegge, 19 S.D., 234; 103 N.W.R., 17
Little vs. State, 60 Neb., 749; 51 L.R.A., 717.
Witty vs. State, 90 N.E. 62; 25 L.R.A. N.S., 1297.
Parks vs. State, 159 Ind., 211; 59 L.R.A., 190.
O'Neill vs. State, 115 Tenn., 427; 3 L.R.A. (N.S.), 762.
State vs. Smith, 33 L.R.A. (N.S.) 179 (Mo.).
State vs. Boswell, 40 Neb., 158.
State vs. Edmunds, 101 N.W.R. (Ia.), 431.

Perhaps it would be useful to specially refer to the Bragg case. At page 929 it is said:

"Thus it is made clear, both by definitions and history, that the word 'medicine' has a technical meaning, is a technical art or science, and as a science the practitioners of it are not simply those who prescribe drugs or other medicinal substances as remedial agents, but that it is broad enough to include, and does include, all persons who diagnose disease and prescribe or apply any therapeutic agent for its cure."

And in the Alcutt case, above cited, at page 680 it is said:

"To confine the definition of the words 'practice of medicine' to the mere administration of drugs or the use of surgical instruments would be to eliminate the very corner-stone of successful medical practice, namely, the diagnosis. It would rule out of the profession those great physicians whose work is confined to consultation, the diagnosticians, who leave to others the details of practice.

"Section 146 (page 1543) of the public health laws provides that persons desiring to practise medicine must pass a regent's examination, made up of suitable questions for thorough examination in anatomy, physiology, and hygiene, chemistry, surgery, obstetrics, pathology, and diagnosis and therapeutics, including practice and materia medica. Diagnosis, therefore, would seem to be an integral part of both the study and practice of medicine, so recognized by the law as well as common sense. The correct determination of what the trouble is must be the first step for the cure thereof. It is a well-known fact that the disease popularly known as consumption may, if discovered in time, be arrested, if not entirely eradicated from the system by open-air treatment in the proper climate, and that in such cases the use of drugs has been practically given up. Would the physician in such cases who by his skill discovered the incipient disease, advised the open-air treatment, and refrained from administering drugs, not be practising medicine? It may be difficult by precise definition to draw the line between where nursing ends and the practice of medicine

begins, and the court should not attempt in construing this statute to lay down in any case a hard and fast rule upon the subject, as the courts have never undertaken to mark the limits of the police power of the state, or to have precisely defined what constitutes fraud. What the courts have done is to say that given legislation was or was not within the limits of the police power, or that certain sections were or were not fraudulent."

State vs. Boswell. This case is of interest as being a decision in a Christian Science case. The court there said:

"The object of the statute is to protect the afflicted from the pretensions of the ignorant and avaricious, and its provisions are not limited to those who attempt to follow beaten paths and established usages. The conservatism resulting from the study of standard authors might be somewhat depended upon to minimize the evils attendant upon unlicensed practitioners' attempts to follow regular and approved methods, although, as against even these, the law should be enforced. Still more stringently should its provisions be rendered effective against pretensions based upon ignorance, on the one hand, and credulity on the other."

THE COMMISSIONER: What court was that?

MR. OSLER: That was a Nebraska decision, my Lord.

"In the State vs. Edmunds case (an Ohio decision) it is said at page 433:

"Undoubtedly the State has the right to determine what acts shall constitute the practice of the healing art, and it may impose conditions on the exercise of that privilege. Having defined the terms of its use, Court should not be too subtle in the use of refined distinctions to save the people from quacks and charlatans, the State has plenary power to prohibit or supervise the exercise of the healing art."

In the Phippen case, which is a Michigan decision, the court said:

"There is no good reason why restraint should not be placed upon the practiee of medicine as well as the law. The public are more directly interested in this than in the practice of the law; and persons who engage in this profession require a special education to qualify them to practise. A great majority of the public know little of the anatomy of the human system, or of the nature of the ills that human flesh is heir to; and there is no profession, no occupation or calling, where people may more easily or readily be imposed upon by charlatans. It is an almost every-day experience that people afflicted with disease will purchase and swallow all sorts of nostrums because some quack has recommended it."

The most recent case upon the subject appears to be that of Lock vs. Ionia, in which a judgment of Steere, J., is fully reported in the Detroit *Legal News* of April 10th, 1915, at page 94.

In Hawker vs. N.Y., 107 U. S. Supreme Court Reports, there will be found on page 189 the judgment of Mr. Justice Brewer, and I may say that in selecting these cases—and I consider that all of them are entitled to respect, apart from the very meaning of the language itself—I have to a very large extent been governed by the fact that respect is paid to them by Mr. Justice Brewer, whom we all know of. In the case of Hawker vs. N.Y., which I have just referred to, Mr. Justice Brewer said:

"No precise limits have been placed upon the police power of a State, and yet it is clear that legislation which simply defines the qualifications of one who attempts to practise medicine is a proper exercise of that power. Care for the public health is something confessedly belonging to the domain of that power. The physician is one whose relations to life and health are of the most intimate character. It is fitting not merely that he should possess a knowledge of diseases and their remedies, but also that he should be one who may safely be trusted to apply those remedies."

THE COMMISSIONER: Do you remember the date of that decision, Mr. Osler?

MR. OSLER: I do not remember that, my Lord. I can easily ascertain that.

THE COMMISSIONER: You need not bother.

MR. OSLER: In Dent vs. West Virginia—which is also a case in the United States Supreme Court Reports—at page 114 it is said (by Mr. Justice Field):

"Few professions require more careful preparation by one who seeks to enter it than medicine. It has to deal with those subtle and mysterious influences upon which life and health depend, and requires a knowledge, not only of the properties of vegetable and mineral substances, but of the human body in all its complicated forms and their relations to each other, as well as their influence on the mind. The physician must be able to detect readily the presence of disease, and prescribe appropriate remedies for its removal. Everyone may have occasion to consult him, but comparatively few can judge of the qualifications of learning and skill he possesses. Reliance must be placed on the assurance given by his license, issued by an authority competent to judge in that respect that he possesses the requisite qualifications."

MR. OSLER: It appears to me that in those cases, my Lord, irrespective of their source, are weighty words for your Lordship's

consideration, and that the liberty of the subject, being undoubtedly valuable and entitled to respect in itself, must give way to the absolute necessity for the protection of the public that the law requires the assurance of proper qualifications for medical practice.

There are, as I said before, my Lord, any number of other cases that may be referred to, but many of them are referred to in the cases I have mentioned.

That, I think, covers the general ground of the position taken by the college.

I ought not to close, however, without saying—speaking generally, that the College of Physicians and Surgeons agree absolutely with the position stated to your Lordship by the University of Toronto, to the general effect that a recognized medical university degree—and when I say "recognized" I mean a degree of the university that adopts the conclusions of modern science—is, and should be, the minimum standard to be required of anybody who exercises the art of healing. I am not at this moment entering into any controversy with regard to any of these other systems. I am not interested in entering into an analysis or consideration of their merits or demerits; they may be all wrong; they may be partly right or partly wrong; or the whole modern system of the universities may be wrong, and these men may be right, and some day the universities may have to go to them and say, "Verily, ye are the men, and wisdom shall die with you," but in the meantime we say that we must take our stand on the accumulated wisdom and experience of all recognized scientific men, and that if anyone chooses to specialize, if he wishes to adopt something different, it is absolutely in the public interest that he should do it knowingly and not in ignorance, after he has been educated, but not by a rejection of what we understand by the word "education."

Subject to the discussion of controversial matters, that is all I have to say, my Lord.

Dominion Medical Monthly

And Ontario Medical Journal

EDITED BY

Medicine: Graham Chambers, R. J. Dwyer, Goldwin Howland, Geo. W. Ross, Wm. D. Young.
Surgery: Walter McKeown, Herbert A. Bruce, W. J. O. Malloch, Wallace A. Scott, George Ewart Wilson.
Obstetrics: Arthur C. Hendrick.
Pathology and Public Health: John A. Amyot, Chas. J. C. O. Hastings, O. R. Mabee, Geo. Nasmyth.
Dermatology: George Elliott.
Physiologic Therapeutics: J. Harvey Todd.
Psychiatry: Ernest Jones, W. C. Herrman.
Ophthalmology: D. N. Maclennan, W H. Lowry.
Rhinology, Laryngology and Otology: Geoffrey Boyd, Gilbert Royce.
Gynecology: F. W. Marlow, W. B Hendry.
Genito-Urinary Surgery: T. B. Richardson, W. Warner Jones.
Anesthetics: Samuel Johnston.

GEORGE ELLIOTT, MANAGING EDITOR.

Published on the 20th of each month for the succeeding month. Address all Communications and make all Cheques, Post Office Orders and Postal Notes payable to the Publisher, GEORGE ELLIOTT, 219 Spadina Road, Toronto, Canada.

Vol. XLVI. TORONTO, FEBRUARY, 1916 No. 2

COMMENT FROM MONTH TO MONTH

Has Medical Inspection of Schools in Toronto, under the Board of Education, had a fall? It has not been able to commence to prevent one of the common, ordinary, every-day, communicable diseases, measles—and to prevent communicable diseases amongst school children was one of its strongest suits. The detection of defective teeth, adenoids, enlarged tonsils, etc., is only of secondary importance to the detection of the communicable diseases.

Whilst the death rate has not been great, it has yet been considerable—and measles has possibilities sometimes in a very large death rate. Recently in the County of Durham, England, there has been an epidemic of measles of very wide extent with over 1,000 deaths. Had the present epidemic been of either diphtheria or scarlet fever, or smallpox, the people would have been up in arms. At the present time they are not sufficiently seized of the dangers of measles; but when it is properly understood that measles carries with it hidden dangers, laughing and scoffing at that hitherto neglected disease on the part of everybody will be turned to concern and anxiety.

Times have changed. A wave of economy is creeping over the community. When it becomes a question of the pocket and the

tax rate people vote more intelligently. Enthusiasm and patriotism are apt to carry the people away, but the tax rate has a sobering influence. When the people become convinced there is wastage in a dual system of public health for children, and that a tangible saving may be accomplished through amalgamation of health departments, then we are bound to get better health administration, in fact, as it has been pertinently stated, the people can have all the health they are willing to pay for. But they do not want to be paying for it twice over.

It is interesting to sit by and watch the evolution of things, public health for instance. First, the Ontario Legislature enacts legislation giving to medical officers of health wide powers; it ensures to the medical officer tenure of office in the administration of his office; for no medical officer can now be removed at the whim of any municipality. Sanction for dismissal must be secured from the chief medical officer of health of the province. This makes for bold, honest, independent and fearless administration of public health. Second, in order to prevent the useless wastage of human life, to say little of the incidence of communicable diseases, the Provincial Board of Health is now supplying all sera free, and calls for early and prompt administration of such sera where indicated. In this direction the public eye is more than ever turned toward the local board of health. Third, in Toronto, the people have voted for the annual election of school trustees. Thus, a new school board might any year be elected which knew nothing of medical inspection. A system of public health of vital importance is then placed under a body of men who could very readily hamper the work of a chief inspector, or chief medical officer. Were it under the municipal officer of public health, they would have no control over it at all. The final court lies with the Provincial Officer of Health. Fourth, the representatives of the people, having an interest in conserving the resources of the people and the revenue in the interests of the taxpayer, have become seized of the overlapping of public health work, and the consequent economic loss which results everywhere from overlapping. Economy and retrenchment are abroad in the land.

Having enacted legislation perfecting public health administration in Ontario, the Ontario Legislature cannot very well refuse to sanction legislation which will bring the medical inspection of schools in Toronto under the administration of the medical officer of health. In fact, legislation may be looked for which will apply to this matter for every municipality of the Province. Indeed, a department of medical inspection of all schools, public

and high, under the Chief Officer of Health of the Province, seems necessary to round out the good public health administration which has been created under the able and progressive hand of the Honourable, the Provincial Secretary.

In the larger cities, when medical inspection becomes a part of the duties of the medical officer of health, whole-time medical inspectors should be employed; and these should preferably have at least ten years' experience in actual practice before taking up the work of medical inspection.

THE CONTROL OF THE OCCUPATIONAL DISEASES

In an editorial in the *Boston Medical and Surgical Journal* of June 10, 1915, attention is called to the fact that it is within the functions of the Board of Health to establish a Bureau of Hygiene, and that the functions of such a Bureau should be the establishment of a central occupational disease clinic for research investigation on the lines of Professor Devoto's clinic for industrial diseases at Milan. Such a clinic should be separate from the tuberculosis clinics, although acting in harmony with them and in co-operation with the University and Hospital clinics throughout the city; it should be the clearing house for all specific occupational diseases and industrial poisonings, should make a study of the prophylaxis of the various industrial affections met with, and should be supplied with ample means for its work of investigation and research.

There should be established an industrial hygiene educational division which should endeavor by all possible means to spread the knowledge of the causes of industrial poisoning, the preventive measures to be taken in various industries, and right modes of work and living for the industrial population. It should also, in co-operation with the various manufacturers' associations and other existing bodies, as well as with the Department of Education, endeavor to conduct a general campaign of education among employers and workers as to the prevention of occupational diseases and the preservation of the health of the workers.—*Therapeutic Gazette.*

News Items

Word has been received by Colonel H. S. Birkett in Montreal, of the death on active service in France, of Dr. Harry B. Yates, who was with McGill University Base Hospital.

Dr. Geo. G. Nasmith, Toronto, has returned to France for active service. He carries with him C.M.G. Dr. Nasmith was married to Mrs. Scott-Raff before returning to the front.

Dr. Hubert Brown, who has been practising at Cooksville, has been recommended by Lieut.-Col. Marlow for the position of Medical Officer of the 169th Battalion. Dr. Brown served in the South African war.

Dr. Edward Ryan, Superintendent of the Rockwood Hospital for the Insane, Kingston, Ont., is appointed psychologist to the Ontario Hospital at Orpington, Kent County, England, which is about ready for occupation.

Major E. K. Richardson, 2nd Brigade, C.F.A., has received instructions for the raising of another artillery battery in Toronto. A large number of students, as well as numerous horsemen, have been waiting for the call for recruits for this unit.

Surgeon-General William Crawford Gorgas, of the United States army, addressed the Canadian Club, Toronto, January 17th, on "Sanitation in Panama." He told the wonderful story of the successful conquest of yellow fever at Havana and the Panama.

Dr. Scott Huntingdon, a prominent physician of Havana, and an American citizen, has offered his services to the Minister of Militia. Dr. Huntingdon has given up his practice in order to join the Canadian army, and has been given a commission in the Medical Corps.

The Board of Control, Toronto, has decided to seek legislation at Queen's Park sanctioning the amalgamation of the medical inspection departments of the city and Board of Education. It is declared that such an amalgamation will mean a saving of $40,000 per annum to the citizens.

Representatives of the four Western Universities and Brandon College, in conference at Edmonton, Alberta, January 13th, unanimously decided to offer to the Militia Department a battalion to be raised from those institutions. A sub-committee was appointed to draft the formal offer and complete the details for organizaton.

Orders for the immediate mobilization at Toronto of the medical officers and nurses for the staff of the Ontario Hospital have been received by Lieut.-Colonel F. W. Marlow, A.D.M.S.