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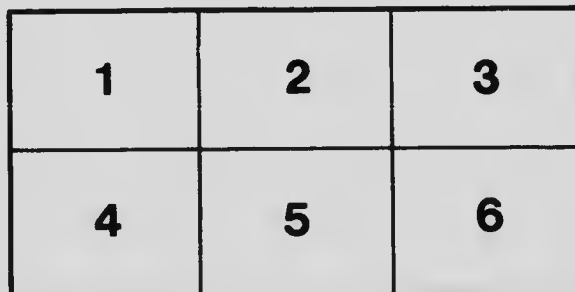
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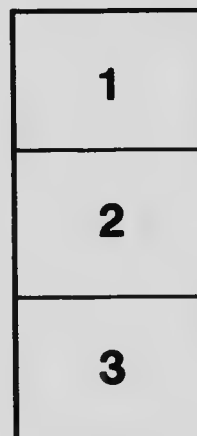
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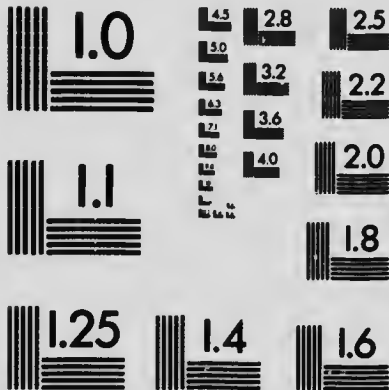
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MEDICAL EDUCATION IN NOVA SCOTIA

By D. A. CAMPBELL, M. D.

Halifax, N. S.



4-0

Paper Read at the Fifty-Second Annual Meeting of the
Medical Society of Nova Scotia

YARMOUTH, JULY 7, 1910

Reprinted from the MARITIME MEDICAL NEWS

MEDICAL EDUCATION IN NOVA SCOTIA.

By D. A. CAMPBELL, M. D.

Halifax, N. S.

(Read at Fifty-Seventh Annual Meeting Medical Society of Nova Scotia, held at Yarmouth, N. S., July 7, 1910).

MR. PRESIDENT

AND GENTLEMEN:—

WITH your permission I now desire to call your very special attention to a matter of vital bearing on medical education in Nova Scotia, a matter which deeply concerns the Provincial Medical Board, as the legally constituted guardian of such education, and one, therefore, which calls for the earnest consideration of this Society as the body which appoints six members of that Board, and which, moreover has the whole care of the medical profession of this Province in its keeping.

Some of you may be already aware that "The Carnegie Foundation for the Advancement of Teaching"—a body richly endowed by Mr. Carnegie and having its headquarters in New York—has recently compiled and published a bulletin of some 350 pages, devoted to the subject of "Medical Education in the United States and Canada," in which is discussed first its history, its present condition, and its proper condition, while the latter half of the book is devoted to a more or less detailed account of the equipment, facilities, and status of each of the 155 Medical Schools in the Republic, and of the eight Medical Schools in the Dominion.

The aim of this work, as I understand it after a pretty careful reading, is to sweep or drive out of existence about four-fifths of the Medical Schools of the United States, and

about half of the Medical Schools of Canada; and how aptly and ingeniously the various essays and reports are fashioned to support and further that destructive aim, is evident from almost every page of the bulletin.

Thirty-one of the Medical Schools of the Republic, and four, or at the most five, of the Medical Schools of the Dominion, are marked for preservation, or amplification, while one hundred and twenty-four schools in the United States, and three, or perhaps four, in Canada, are plainly marked for slaughter, and to use the language of the Report: among those whose "speedy demise" is aimed at is the Halifax Medical College.

The main or most serious charge against the college is that it is mercenary or "commercial" in its spirit and ideals, a charge which its whole history, and the character of the men connected with it, since its inauguration as a Department of Dalhousie University forty-three years ago, most emphatically disproves.

But I had better give you the exact words of the report or criticism from the Carnegie Foundation's bulletin.

I shall now read to you from page 320, giving part of the report of the Halifax Medical College, as follows: "Three fourths of the fees are distributed among the professors, and this disposition of funds is reflected in the condition of the medical college; it possesses an ordinary, ill-smelling dissecting-room and a single utterly wretched laboratory for pa-

thology, bacteriology, and histology.

"A microscope is provided for each student.

"Though the same laboratory serves for the provincial board of health, no animals are used.

"There is no museum worthy of the name, and no laboratory work in physiology or pharmacology."

"The laboratory sciences have been starved that small dividends might be paid to generally prosperous practitioners."

The so-called report concludes thus:

"The question may fairly be asked: what is the value of the Dalhousie degree in medicine, won by students whose opportunities have been provided by Halifax Medical College? The connection is, from the standpoint of Dalhousie University, highly objectionable."

At page 36 of the bulletin, the Halifax Medical College is grouped with a number of institutions of which it is said:

"It is indeed stretching terms to speak of laboratory teaching in connection with them at all."

On page 88, we read:

"Elsewhere, dissecting-rooms are indeed found, but the conditions in them defy description. The smell is intolerable; the cadavers now putrid, as at Temple University (Philadelphia), the Philadelphia College of Osteopathy, the Halifax Medical College, and in many of the Southern Schools, including Vanderbilt; again dry as tanned leather,—at the University of Tennessee, &c."

At page 139, the report, referring to the Halifax Medical College, speaks of "the disgraceful condition of the premises."

At page 325, Laval and Halifax Medical College are characterized as "feeble"; and at page 326, the Halifax

Medical College is given notice to get off the map as follows:

"At this moment the needs of the Dominion could be met by the four better English schools and the Laval department at Quebec. Toronto has practically reached the limits of efficiency in point of size; McGill and Manitoba are capable of considerable expansion. The future of Kingston is at least doubtful."

With this summing up, it will be noted that Laval at Montreal, the Western at London, Ontario, the Halifax Medical College, and possibly Kingston, are consigned to the scrap heap. According to the report they "have no present function."

The parts of the report not included in this summary deal fairly enough with the Halifax Medical College and therefore do not cast discredit upon it.

But you will all agree with me that the parts I have quoted would, if true and well-founded, constitute a severe indictment of the Halifax Medical College, and that in any case they call for the earnest consideration, not only of the College itself, but also of Dalhousie University, of the Provincial Medical Board, of the Medical Society of Nova Scotia, of the Provincial Board of Health, and, through that last body, of the Provincial Government of Nova Scotia.

But to answer all these grave charges against the Halifax Medical College is, I am glad to say a comparatively easy matter. All that is necessary is to get at the facts.

And here let me state that in proceeding to answer these charges, as I now propose, I have not been commissioned or instructed by the Medical College so to do. I did indeed inform the Executive of the College of my intention to address the Society on

this subject, and may be considered to have the consent of that body to do so; but what I have to present is entirely my own independent, personal view of this matter, based on an intimate personal knowledge of the College throughout its history and a full understanding of all the questions involved.

For such a task, it may, perhaps, be allowed that I have some needed qualifications. For some forty years I have been familiar with the affairs and work of the College and with the officers and teachers therein. For thirty-five years I have been one of the teachers, and it now happens that of all the present professors I am the senior in years of service.

Some further qualification may also, perhaps, be allowed me, when I come to speak of laboratories and laboratory teaching, seeing that some time ago I spent eight months in the laboratories of the Medical Department of Johns Hopkins University, and should therefore know something as to what laboratories and laboratory teaching should be.

Now, I think we shall be the better able to weigh and appreciate this Carnegie Foundation report and the serious charges therein contained, if we inquire somewhat in detail into the circumstances and manner in which that report was obtained or arrived at.

Two delegates, Mr. Abraham Flexner, of New York, and another gentleman, Dr. N. P. Colwell, of Chicago, were sent by the Foundation to visit the Halifax Medical College and report upon it.

All the circumstances connected with their visit happened to prove very unfortunate for the success of their mission, that is, assuming that their mission was to gather up all

material and relevant facts bearing upon the subject of medical education at Halifax, and to present an accurate and just report.

In September, 1909, President Pritchett of the Foundation, sent a letter to Halifax intimating that a visit of delegates was contemplated, but stating no definite date for the visit.

It so happened that when, about the middle of the following month, the delegates arrived suddenly and unexpectedly in Halifax, Dr. L. M. Murray, the Pathologist and the Secretary of the Halifax Medical College, was absent in Montreal, and no officer of that College ever saw the delegates, or even knew of their arrival in Halifax until after they were gone.

When the delegates arrived in Halifax it was after a certain midnight, in fact about one o'clock of a Saturday morning—the day as you all know which is an off-day, or at best only a half day, in Halifax.

The following morning President Forrest, of Dalhousie University was informed of the arrival of Mr. Flexner and Dr. Colwell, the delegates, at the Halifax Hotel, and he with Dr. Lindsay, of the Medical Faculty of Dalhousie, promptly called upon them at the hotel.

Mr. Flexner asked such questions as he thought proper, which were duly answered.

The delegates, who were determined to leave the city by an early train that afternoon, then paid visits to Dalhousie University, the Halifax Medical College, the Victoria Hospital, and the Halifax Dispensary.

The whole rush performance was enacted in about four hours, and the delegates departed, apparently assuming that they "knew it all," though they had not conspired with a

single officer of the Halifax Medical College, though they had inspected only a portion of its equipment, though their visits to the Dispensary and the Victoria General Hospital (entirely without the knowledge of the Superintendent) was entirely too brief and cursory to obtain correct knowledge of their work and of their teaching facilities available for the College and its students, and though their inspection and enquiries were prosecuted with such haste that they appear to have been unable to take away with them any clear and accurate understanding of even what President Forrest and Dr. Lindsay had told them.

President Pritchett, in his introduction to the bulletin, apparently having in view such rush inspections as that made at Halifax, and anticipating objections thereto, has asserted by way of defence to his methods, "a trained observer can quickly grasp the spirit, ideals and "facilities of a professional or technical school."

It is regrettable to have to state that his delegates who visited Halifax have displayed no such wonderful perspicacity.

In the draft report prepared by the delegates or Foundation, and sent, in February 1910, to President Forrest, of Dalhousie, for "comment," as the letter accompanying it stated, there were, among other grave inaccuracies, such astounding misstatements as the following:

1. That in Medicine Dalhousie University is the *licensing authority* for the Province.
2. That Dalhousie University subjects the students of the Halifax Medical College to only a *single* examination.
3. That one-half the members of the Medical Faculty of Dalhousie

University are members of the faculty of the Halifax Medical School.

4. That three-fourths of the "total income" of the College are distributed among the instructors.

5. That there is no museum and no library in the school.

6. That the two hundred free beds at the Victoria General Hospital are *not* all open to the Medical School.

7. That the students are *supposed* to attend the City dispensary.

Every one of these statements is, as you all know, entirely opposed to the facts.

(1). *Not* Dalhousie, but the Provincial Medical Board is the licensing authority.

(3) Dalhousie subjects the students of Halifax Medical College *not* to a "single examination" at the close of the medical course," but to a strict examination at the close of *each year* of the course, which since 1908 has been extended to five years.

The Medical Faculty of Dalhousie is not largely made up from the Faculty of the Medical College, but the two are quite independent, and in personnel quite different.

(4). Instead of three-fourths of the "total income," only about forty per cent. of the *fees alone*, have been distributed among the teachers of the College throughout its history.

(5). There are both a museum and a library; the museum is small but suitable and useful, and the library is valuable, consisting of over 3,000 volumes, and is constantly being increased by the addition each year of \$200 worth of the latest books, bought with the income from the Cogswell Fund.

(6). The 200 free beds at the Victoria General Hospital are *all open* to the Medical College, and the clinical teaching is extensive, and, with the

small classes in attendance, is very thorough and effective.

The students are not merely *supposed* to attend the City Dispensary, but they are *required* to attend there, and do attend, and in connection with that institution, though despised by the delegates as "small," receive valuable teaching and are afforded opportunities for good practical work.

It is certainly very remarkable that two experts, certified to be able to learn all about the spirit and ideals of an institution at a glance, should have drawn up a report containing so many inaccuracies; but it all goes to illustrate what I have already said about the hurried and utterly inadequate character of the visit of inspection.

Perhaps, moreover, some of you will also note that the errors are all on one side, all tend one way, all go to the making out of a case against the teaching of the Medical College and against the value of a Medical diploma or license granted in Halifax.

So glaring were these errors that, after the "comments" sent back from Halifax, these particular misstatements were eliminated and do not appear in the report as published on pages 320 and 321 of the bulletin.

So far no harm was done; but there were other grave errors and omissions in the draft report, for which the Halifax "comments" supplied considerable material facts for correction.

These "comments" and facts, however, the Foundation saw fit to ignore, and so stuck to their errors and consequent misrepresentation.

For example, the draft report had disposed of the whole subject of practical Anatomy thus:

"The Medical College possesses an ordinary, ill-smelling dissecting-

The Halifax "comment" corrected the false and misleading statement as follows:

"In the Halifax Medical College there is an ordinary, well-lighted dissecting-room.

There is an ample supply of material for dissections and for the operative surgery class, the result of a very satisfactory Provincial Anatomy Act.

Formalin with Arsenic and Glycerine are used as preservatives.

There is an appointed time (2 hours) each day for dissecting, during all of which the professor and his assistant are present aiding students or examining them on their work.

Every student is supplied, free of expense, with a set of bones for use at home."

The Halifax statement of facts shows that in the Halifax Medical College, most ample attention is devoted to the important subject of Anatomy.

The Foundation's report of the matter would make it appear that the teaching of Anatomy at the Halifax Medical College is mere make-believe and disgraceful.

The truth is that the subject of Anatomy is taught at the Halifax Medical College in a manner that will compare favorably with the teaching in any of the best schools in America.

It is true the College has no expensive refrigerator plant, but it uses proper means for the preservation of the dissecting material.

But every point of the Halifax statement of facts regarding Anatomy, the Foundation deliberately ignored, and adhered to their meagre, "ill-smelling," and misleading statement.

The foundation even go beyond the "ill-smelling dissecting-room" phrase

of the bulletin, charge the Halifax Medical College with having "putrid cadavers."

That all such statements in this bulletin regarding the Halifax Medical College are absolutely without any justification in fact, can be vouched for, and is vouched for, by many Halifax men who are quite as trustworthy and reliable as any connected with the Carnegie Foundation (or any other body.)

And here I may call your attention to a significant little incident.

You will recollect that it was noted in the Halifax statement regarding Anatomy at the Halifax Medical College, that "Every student is supplied, free of expense, with a set of bones for use at home."

This fact with all the rest of the Halifax statement, the Foundation have deliberately ignored and suppressed.

Some might suppose that this fact was passed over as of small importance; but if you turn to page 83 of the bulletin, you will find that when the College is "Cornell (Ithaca)" and not the "Medical College (Halifax)," the Foundation consider such a fact of so great importance that a very special statement of it should be made in the bulletin. Thus you will find on page 83 the following foot-note:

"At Cornell (Ithaca) a complete set of bones is given out to each student."

Thus you will see that a practise which is worthy of special note and credit in the case of Cornell (Ithaca) is only worthy to be ignored in the case of the Halifax Medical College.

Just ponder that incident for a moment, in connection with all the other harsh statements and determined omissions, and see what you will be forced to conclude regarding the

spirit, reliability, fairness, and purpose of this Carnegie Foundation report.

When you find a critic deliberately and persistently making statements tending to the disparagement of an institution; when, at the same time, you find that critic persistently suppressing facts which would clearly tend to the credit of that institution; what conclusion do you come to regarding the "spirit and ideals" of that critic?

Do you find the spirit of truth and justice, or the spirit of prejudice and preconceived purpose?

Now, let us turn to another paragraph of the delegates' or Foundation's draft report, and the Halifax "Comment" thereon.

The draft report asserted that "three fourths of the *total income* are distributed among the instructors."

The Halifax "Comment" admitted that three-fourths of the fees (not the total income) were *sometimes* distributed among the teachers, but it added this important statement:

"A larger percentage may be required for expenses, in fact on occasions the whole fees for the year have been surrendered by the teachers."

As a matter of fact it was by paying the teachers nothing for two full years, that the College was able to put a new wing to the building and provide the pathological laboratory and equipment.

But the Foundation utterly ignored this important statement of fact thus brought to their notice in writing. The important qualifying statement finds no place in the Foundation's report.

Why?

Perhaps you can furnish an answer.

But you will at least note that such a statement about the teachers getting

no part of the fees for a year or two at a time, in order that College needs might be the better served, would have been a complete answer to the Foundation's charge of "Commercialism," and it would also have fairly disproved the Foundation's main thesis that "The Laboratory sciences have been starved that small dividends might be paid to generally prosperous practitioners."

The whole report regarding the the Halifax Medical College, from the very first line to the last, is distinctly unfair and misleading.

At the very outset the College is described as a "proprietary school."

This is misleading. The Halifax Medical College is not a "proprietary school" at all in the sense that some of the United States schools are.

The members of the College corporation hold no stock or anything of the kind, and have no individual legal claim whatever in any property or funds of the College, either as dividends or otherwise.

The Halifax Medical College is no more a "proprietary school" than is any university in the country.

The College collects its revenue, including fees from students, and disburses those revenues as it thinks best in the interest of the educational work in which it is engaged.

If the College Corporation votes an honorarium to the professors and other teachers, they get it: if the Corporation does not vote such honorarium, they do not get it, and have no legal claim for it or any sum whatever.

The small sum which the College Corporation usually distributes each year among the teachers are in no sense dividends or salaries, but are entirely analgous to the honoraria distributed among directors of banks and other corporations, and among

the members of other public bodies, such as the Halifax School Board, not at all by way of dividend or salary, but merely to mark and promote regularity of attendance and attention to official duty.

If a professor or other teacher neglects to give a lecture or demonstration, he loses his honorarium for that hour.

This system has been found to work well in the business world in promoting regular attendance at meetings, and it is also found to work well in the College, and perhaps ought there, especially, to have a place, since nearly all the teachers are engaged in busy practice, and often find it by no means easy to attend to their College duties.

But still I am bound to add, what I know to be a fact, that the teachers one and all think a great deal more of their college work and of their service to medical education, than they do of the small honoraria which merely mark their regularity of attention to duty.

It now occurs to me, Gentlemen, that in giving you this little account of how this Carnegie Foundation report was manufactured or arrived at, I have incidentally given a fairly complete retutation of most of the charges urged and uttered against the Halifax Medical College.

I may here just mention another deliberate omission in the Foundation's report, though it was specially called to their attention in the Halifax "Comment," namely, that the Halifax Medical College provides teaching in Psychiatry, at the Nova Scotia Hospital for the Insane, an institution of some 400 beds, which, under the present highly competent superintendent and his able predecessors, has ever been conducted on the latest and most approved methods for the care

and treatment of the mentally afflicted.

Hospital improvement and expansion are going on in Halifax, and with the development of the new Children's Hospital, improved facilities will be available for teaching in Pædiatrics.

But it now still remains that I should make special reference to the bulletin's aspersions as to the College Laboratory for the teaching of Pathology, Bacteriology, and Histology.

You will recollect that the bulletin's statement is:

"The Medical College possesses a single utterly wretched laboratory for pathology, bacteriology, and histology."

And this phrase, "utterly wretched," is used with reference to this laboratory several times throughout this libellous volume.

The words of the delegates' report might be understood to indicate that they considered it highly objectionable that a single room should be used for the three kinds of laboratory work, but, of course, as you know, there is no objection to a single room, provided it is large enough and has sufficient equipment to accommodate the several classes of students that there work at these several branches.

The Laboratory was designed and equipped for routine work and teaching, and so far it has proved entirely sufficient to meet the requirement and the needs of the students of the College.

The classes are always small, never exceeding twenty in Normal Histology, or fifteen in Pathology and Bacteriology.

There are four teachers, two for Normal Histology, and two for Pathology and Bacteriology. One of the latter being also the Provincial Pathologist.

A new wing of the College building was specially designed and built to provide this laboratory. The cost of building and equipment was about \$5,000, mainly provided through the teachers receiving no part of the fees whatever for two years in succession.

This laboratory room is 40 feet long, 24 feet wide, and 13 feet in height. It is lighted from three sides by seventeen windows, each three feet by eight feet, with those on the South and East sides obscured so as to avoid glare. The light throughout the room is excellent.

The room is hot-water heated, electric-lighted, and well ventilated.

Plain tables are fixed round the sides of the room, and afford liberal working space for thirty students at once, or half as many again as the largest class that so far has ever been in attendance.

Such is an accurate description of the "single room" which the delegates describe as "utterly wretched."

The equipment of the laboratory cost \$2,000; and it is all comparatively new and in good order. This equipment includes twenty-seven students' microscopes, and also four high-class instruments for bacteriological work.

While the supply of instruments known as student's microscopes has been more than sufficient for any class up to date, yet the College's own supply of high-class microscopes is rather limited; but the professors have regularly been in the habit of supplying the shortage by lending their own instruments, so that each student has always had a suitable microscope for his work. When the classes increase the College will of course have to provide itself with more high-class microscopes.

There are also five microtomes of various types; an autoclave and other sterilizers; two incubators; facili-

ties for making culture media, and all the glassware and material required for practical work.

The fact of this Laboratory being used by the Provincial Bacteriologist is of great advantage to the College and its students, because it affords at all times an ample supply of varied and suitable material for pathological and bacteriological work.

That in the public interest, however, the work of the Provincial Pathologist should be greatly extended and put on an improved basis, is a matter which, at a later stage, I shall urge upon your attention.

The College so far has not been able to provide laboratory teaching in pharmacology, in the sense in which that word is used in the delegates' report, that is by making experiments to observe the effects of drugs on living animals.

But the College does something far more practical and useful; it gives all its students a very thorough training in Practical Pharmacy; and it does that especially for the reason that many of our practitioners in this Province have to do their own dispensing.

For this course in practical pharmacy the Foundation gives the College no credit whatever. Although attention was called to it in the "Comment."

As to the charge that there is no laboratory work in physiology, it is to be said that hitherto the teaching in the physiology has been mainly didactic.

Two years ago, however, a move was made to provide, in some measure, for laboratory work in this subject; money was voted for the purpose, and a gentleman was chosen as teacher. It is now definitely decided that, at the next session of the College, he will actually begin this work.

Physiological Chemistry is provided for at Dalhousie.

It seems to me now, gentlemen, and I trust it will appear the same to you, that I have already fairly covered and refuted all the serious charges against the Halifax Medical College, preferred by these distinguished, but by no means infallible critics, and that I have also given you ample material from which to form a correct judgment as to the character, aim and spirit of this extraordinary production of the Carnegie Foundation.

That there is much in the volume of great value, which may be read with profit by medical men and educationists, I do not for a moment deny; but the evident aim of the whole work is altogether too destructive, and the methods adopted in furtherance of that aim are not characterized by sufficient regard for truth and justice.

In my opening remarks I intimated that if the charges against the Halifax Medical College were true and well-founded, the fact should call for prompt action on the part of the Provincial Medical Board and of this Society; but I think that I have shown you clearly that all the main charges are without foundation in fact.

But while it is only necessary to cite existing facts in order to refute the disparaging charges of the Carnegie Foundation delegates, it should be distinctly said that the Halifax Medical College is far from claiming perfection, or that it would not very joyfully welcome more extensive facilities for its work.

The ideals and aims of the College have always been of the highest.

When at first it was inaugurated as a Department of Dalhousie University in 1867, it was a part of a movement among the medical men of

Halifax to elevate the standard of medical education in this Province.

It was felt that amendment of the Medical Acts was desirable for the elevation of that standard, but that such improved laws would be attended by some hardship to the young men of the Province, desiring to study medicine, and by some public injury through a scarcity in supply of qualified medical practitioners, unless a Medical School were opened in Halifax to save our students the greater expense of going abroad; and indeed at that time the most accessible schools, namely, those in the United States, were far from being all that was thought desirable, their period of study being too short and their requirements as regards preliminary education being nil.

Halifax at that time had a body of medical men of very marked ability, including Drs. Charles Tupper, A. P. Reid, A. J. Cowie, W. J. Almon, D. McN. Parker, Edward Farrell, W. B. Slayter, H. Gordon, R. S. Black, Alexander Hattie, and J. R. DeWolf; and to those may be added George Lawson, Professor of Chemistry at Dalhousie, a very thorough man in both Chemistry and Botany, with extensive experience as a teacher in Edinburgh, where he was conspicuous in the introduction of laboratory methods in the study of Biology and also in Kingston, Ontario, where he had taken part in the inauguration of the Medical Department of Queen's University.

Nearly all of these men had received more or less of their professional education in Edinburgh, London, Dublin or Paris, and the standard which they demanded was far higher than that generally prevailing on this Continent.

It was to promote such a progressive aim in medical education, and it

was through the enthusiasm of men of such ability, training, and ideals, that the Medical School at Halifax took its rise, and that school has never yet departed from the high ideals which attended its birth.

From the reorganization of Dalhousie onward, the establishment of a medical school at Halifax was constantly engaging the attention of the profession, and the man whose services proved most helpful to that end was Dr. (now Sir Charles) Tupper.

The service with which a medical man in this Province is most likely to credit Sir Charles Tupper are: (1) His defence of Dalhousie; (2) His advocacy of a Medical School, and (3) his reorganization of the Halifax Hospital, placing it on modern lines and a practical working basis.

Without this last item the establishment of a medical school would have been impossible.

When the question was first mooted about 1863 by the Governors of Dalhousie University the Medical Society of Nova Scotia declared it not feasible, because there was no Anatomy Act, and the clinical facilities were insufficient.

Sir Charles was at one and the same time Provincial Secretary and President of the Medical Society and one of the Governors of Dalhousie University, and his influence was, accordingly, very great and helpful.

In 1867 the school was inaugurated as a Department of Dalhousie University but only as a preparatory school. This, however, was found insufficient to meet the public needs of the Province, and accordingly the full school was organized in 1870.

The following requirements which the founders laid down for the school, prove that its educational aim was high:

(1) Compulsory Matriculation Examination in the subjects then required by the Medical Council of Great Britain.

(2) The period of medical study, after matriculation, to be extended to four years.

(3) A graded curriculum.

(4) Laboratory teaching as far as that could be made possible.

(5) A high standard for examinations, written, oral, and clinical.

That was in 1870. The ground taken by the founders of the Medical School at Halifax was in advance of that held by the Medical Schools of the United States at that date.

Every good feature adopted by the founders of the School forty years ago, has been scrupulously maintained to this day. The only changes made, have been in the way of progress—the Medical Course, then extended to four years, has since been extended to five years, the professional curriculum has been enlarged, the laboratory and clinical teaching have been increased, and the professional examinations have been made even more practical and thorough so as to test a candidate's actual fitness for practice.

As the leading man in the organization and development of the school from 1867 to 1870, the Dean of the Faculty at that time, is with us here to-day, still hale and hearty in his happy old age—I refer to Dr. A. P. Reid, and as Dr. Reid's career displays some points of considerable interest I am sure you will allow me here a brief paragraph thereupon in passing.

Born in Ontario 76 years ago; Alexander Peter Reid graduated in Medicine from McGill in 1858; pursuing post-graduate studies in Edinburgh, London, Paris, and at the Rotunda Hospital, Dublin; he return-

ed to Canada, and started practice in Huron County, Ontario. Shortly afterwards he undertook an expedition and crossed the Continent overland on British territory, to British Columbia. From here he passed down the Pacific coast to Oregon, and here served for a short time as surgeon to a volunteer force in a war against the Indians. Continuing South he reached Mexico; and from Mexico found his way to New York, where he studied for a winter at New York University. Coming then to Nova Scotia, he practiced for a time in Guysboro, but soon after removed to Halifax and became the Dean of the Medical School. His subsequent career is familiar to you all, how that, successively he served most acceptably, as superintendent of the Nova Scotia Hospital, then Superintendent of Victoria General Hospital, and lastly as Secretary of the Provincial Board of Health, in all of which he has done valuable work for the public.

Some more special notices should be made of some others who took part in the organization of 1870; but time presses.

In 1875, for financial reasons and to secure more commodious quarters, especially for the Anatomy work, the Medical School became separately incorporated as the Halifax Medical College, with degree conferring powers, and erected the new building on College Street.

The College then affiliated with the new University of Halifax, and Students were at liberty to take the examination of either the College or the university. All the students of that period, however, took the diploma of the College; and one gentleman who took the examinations and diplomas of both, subsequently obtained degrees in Medicine and Surgery in Britain,

and is now one of the leading surgeons of this Province.

In 1885 the University of Halifax having become inoperative, the College was again drawn towards Dalhousie, but for financial reasons an open affiliation with the University could not be maintained. Dalhousie organized a full medical faculty, and undertook the teaching of the science subjects of the medical course, while the Halifax Medical College devoted itself entirely to the teaching of the strictly medical subjects. The two together have provided a very full and effective course of training for medical practitioners; the College having practically ceased conferring degrees, while Dalhousie has become the examining and degree-conferring body.

The present arrangement between the College and the University is working very well for all concerned, the public included; but it has its objections and just as a few years ago the McGill Medical School became an integral part of McGill University, so it is not unlikely that, before very long the Medical School at Halifax may again become an organic part of Dalhousie as it was at the beginning and should always have remained.

But of all such facts regarding the history of the College, and of its real aim and ideals, the able and expert delegates of the Foundation remained profoundly ignorant.

Another unfortunate result of the extreme brevity and hurry of their visit was that they evidently learned nothing about the constitution and practice of our Provincial Medical Board. There is indeed not a single line in their Report to indicate even the existence of such a Board.

Yet this body of experts and censors regard properly constituted State Boards as lying at the very foundation of a sound system of medical

education, and as "the instruments through which the reconstruction of medical education will be largely affected." (see p. 167).

But if the delegates had made proper inquiry and had learned the truth, they would have discovered that the Provincial Medical Board of Nova Scotia has a constitution embodying every feature which they themselves set down as necessary and desirable.

At page 171 of the bulletin we read:

"A model state board must therefore guard the following points: the membership of the board must be drawn from the best elements of the profession, including—not, as now, prohibiting—those engaged in teaching; the board must be armed with the authority and machinery to institute practical examinations, to refuse to recognize unfit schools and to insist upon such preliminary educational standards as the states own educational system warrants; finally, it must be provided either by appropriation or by greatly increased fees with funds adequate to perform efficiently the functions for which it was created. The additional powers needed in order to deal effectively with the practice of medicine, lie outside the present discussion."

If the delegates had made due inquiry they would have found that the Provincial Medical Board of Nova Scotia possesses all the legal authority here set down as necessary to a "model board," including the "additional powers," and that, in practice, the Board exercises all its authority as to preliminary education and professional education, and further that it uses its "additional powers" so as "to deal effectively with the practice of medicine," and to such good purpose that we have few if any unqualified practitioners and "medical sects" are unknown in this Province.

The state boards with which the delegates are familiar are evidently of a very different character; for, at page 170 of the bulletin, we read:

"One or two of the states have latterly begun to introduce certain practical features into their examinations."

On the other hand, the professional examinations of the Provincial Medical Board of Nova Scotia are conspicuously practical—written, oral, and clinical—dealing with the subjects of the fourth and fifth years in such a way as to test thoroughly the fitness of the candidate to engage in the practice of medicine.

If the delegates had duly inquired into the constitution and practice of the Provincial Medical Board they would have found that Medical Education in Nova Scotia is on a perfectly sound and safe basis.

In concluding this part of my subject let me call your attention to the fact that, so thoroughly satisfactory is the Nova Scotia system of Medical Education, the General Medical Council of the United Kingdom has agreed to Reciprocity in Registration between this Province and Great Britain.

The requisite acts of Parliament having been previously passed, the General Medical Council, in May, 1907, adopted a resolution to the following effect—the exact phrasing being somewhat abbreviated.

"That any person who holds the degrees of Doctor of Medicine and Master of Surgery of the Dalhousie University, or of the Halifax Medical College, or who holds the Diploma granted after examination by the Provincial Medical Board, and is at the same time duly registered in the Medical Register of Nova Scotia, shall be entitled to be registered in the Colonial List of the British Medi-

cal Register, and shall thereby become equally entitled to the same privileges as persons registered in the regular Home Register."

This includes the right to practice in Britain and in certain other colonies and countries, and also gives admission to the army and other medical services.

It may not be pleasant for us to fall under the condemnation of the Carnegie Foundation delegates after a four hour visit, but we are not entirely without friends and need not feel either cast down or dismayed. Respecting the future of the Halifax Medical College, something further however remains to be said.

The Carnegie Foundation has indeed moved for its prompt abolition, but I do not suppose that any person in this Province would think, for a moment, of seconding such a motion, unless indeed merely for the purpose of giving formality to a discussion.

In any such possible discussion I would briefly note the following points:

(1) The territory to be specially served by the Halifax Medical College comprises the three Maritime Provinces of Canada and the Island of Newfoundland a—region of far greater area than that of all the New England States, and with a population of about one million and a quarter, or about one-sixth the population of the Dominion; and in this region the present proportion of medical practitioners to population is one to about twelve hundred.

(2) The Carnegie Foundation itself recognizes the desirability of local Medical Colleges, with a view to serving the needs of special territories. At page 145 of the bulletin we read:

"A reconstruction of medical education cannot ignore the patent fact that students tend to study medicine

in their own states, certainly in their own sections. In general, therefore, arrangements ought to be made, as far as conditions heretofore mentioned permit, to provide the requisite facilities within each of the characteristic state groups. There is the added advantage that local conditions are thus heeded and that the general profession is at a variety of points penetrated by educative influences."

(3) The Foundation in fact admits that Halifax is a proper place for a medical school, for at page 150, it is declared: "At some future time doubtless Dalhousie University will need to create a medical department"; yet the Foundation now absurdly asks that Dalhousie should destroy what she now has in herself and in virtual affiliation with herself, before setting about building up a new school.

(4) All the reasons that called for the inauguration of the school, in 1867 and 1870, still exist and demand its continuance.

(5) It is entirely proper, if not imperative, to consider the reputation and interests of all the 211 graduates of Dalhousie and the Halifax Medical College, now living and practising not only in Nova Scotia but in many other countries. It is indisputable that Dalhousie and the College are now better able to give a thorough medical training than ever before. If, therefore, the College should now be abolished at the instance of the Foundation, it would be a declaration to the world that the medical education heretofore provided at Halifax had been comparatively worthless—a declaration that would not only be grossly unfair to all the living graduates but would also be positively untrue.

(6) Nova Scotian Degrees in Medicine have already attained such standing and recognition in the Brit-

ish world at least, that it would be sheer folly to do anything tending to jeopardize or forfeit their value.

(7) We shall more readily attain the best results in Medical Education by going on to improve what has already been accomplished by nearly half a century of faithful and intelligent effort, than we should by foolishly destroying a valuable existing institution, and then being compelled, as we should be at some near future time, to start anew and build up from nothing.

And this reference to improvement brings me to the last topic upon which I propose addressing you to-day.

Now, the first great improvement that is needed, not merely in the interests of Medical Education, but also and chiefly in the interests of Public Health, is the organization and establishment by the Provincial Government, of an ample, thoroughly equipped, and well-manned Pathological Institute.

The present condition of the Laboratory used by the Provincial Pathologist is not sufficient to deal with the ever growing needs of the Public Health of the Province.

The present facilities for Clinical Pathology at the Victoria General Hospital are entirely inadequate.

The work already accomplished by the Provincial Bacteriologist at the Laboratory of the Halifax Medical College is about all that could be done with the present equipment by a man who is not so adequately paid by the Province as to be able to devote his whole time to the work; but the public needs and demands of the Province are constantly increasing.

Hence improved accommodation and equipment, with facilities for research work, are, from the point of view of the public health alone simply indispensable.

The immediate needs are: (1) A new building specially designed and adapted for this work; (2) Ample equipment for the doing of all such work as engages attention in a modern and well-provided Pathological Institute; (3) This new institution should be presided over by a thoroughly trained and first-class pathologist, devoting his whole time and energies to the work, with an adequate salary, and with a sufficient corps of assistants.

This forward move is demanded moreover not only by the increasing needs of the public health, but also by the needs of the Hospitals in the various Provincial towns, and especially by the needs of the Victoria General Hospital.

Such an institution could be so utilized as to afford considerably increased facilities for laboratory work in medical education; and the Halifax Medical College has some substantial right to ask such assistance at the hands of the government, in view of the fact that for the past ten years the laboratory of that College has really been supplying the place of such an institution for the benefit of the whole Province.

The many and varied services of the medical profession of the city and Province for the promotion of the Public Health which as was said by Disraeli is "the great concern of statesman," may also well be considered to entitle them to ask some such recognition at the hands of the government.

While the government is now very properly doing much for Technical Education, is it not proper that it should also do something for Medical Education, and at the same time provide indispensable help for the conservation of the health of the whole Province, and especially to afford

most material and greatly needed assistance in fighting the Great White Plague.

A fully equipped Pathological Laboratory, under the superintendence of a thoroughly trained man, affords most valuable assistance to the practitioner in both diagnosis and treatment; but "perhaps even more important than its services to curative, have been the suggestions of bacteriology to preventive medicine;" and preventive medicine is a matter to engage the special attention and care of governments.

There is ample room on the Victoria Hospital grounds for such a building as would be required, and a first class laboratory there would be convenient to meet the needs of both the Hospital and the Medical College.

For his highly meritorious services in conserving the Public Health and promoting Medical Education, I desire to mention the name of one man whose memory is deserving of a high tribute from both the profession and the government—I refer to the late Dr. Edward Farrel, "a man in civic action warm," who came to an early grave through over-devotion to the public service.

When the Provincial Government establish such a Pathological Institute as I have shown to be indispensable, they will perform a graceful and proper act if they give it the name: "Farrell Pathological Laboratory."

Mr. President and Gentlemen, I have to thank you for the patient hearing you have given this rather long address.

I trust I have afforded you some assistance in measuring the value of this Carnegie Foundation report; in judging the character of the strictures against the Halifax Medical College and Medical Education at Halifax; in seeing the folly there would be in

suffering such ill-founded criticism to have any destructive effect on the College; in appreciating the fact that Medical Education in Nova Scotia is on a sound and safe basis; and in recognizing the urgent need of a

new and thoroughly equipped Pathological Laboratory, in the interests of Public Health, and of Medical Education.

If our work is to endure we must make it fit to endure.

DISCUSSION.

Dr. John Stewart said: I think that Dr. Campbell's carefully prepared paper demands the serious consideration of this society. I think we all feel that he has shown very clearly that the estimate made of the Halifax Medical College by the Carnegie Foundation is a very unfair one, very misleading, and influenced by prejudice. To my mind the keynote to the nature of the report lies in the word "mercenary." The use of such a word in describing the founders or the teachers of the College is simply unjust and entirely uncalled for. Who, for instance, that knows him, can attribute mercenary motives to Dr. A. P. Reid, or indeed any of those who founded and fostered the College. They certainly gave more than any pecuniary return has given them.

Nothing but prejudice, or gross ignorance of the history of the College could lead to the use of so offensive a term.

The friends of the College do not think of claiming rank with the foremost medical schools; what they do claim is that the College gives a sound and efficient training in medicine, and they can justify their attitude by pointing to the many graduates of the College now practising successfully, and holding honourable positions not only in the Maritime Provinces and Newfoundland, but in Western Canada and abroad.

I believe this Society, numbering as it does many graduates of the College, has confidence in the College, and considers that it supplies a need in these eastern provinces.

The gentlemen who report so unfavourably on the College comment on our limited laboratory facilities. Well we should like more apparatus, but so does every laboratory. There is always something more wanted. And it is the man more than the laboratory that makes for efficiency. There were no pathological laboratories when Lister developed antiseptic surgery; Koch, a country practitioner in a lonely Prussian village, had no laboratory, but what he could construct himself. Trudeau alone in the Adirondacks demonstrated the main facts in our knowledge of tuberculosis.

The hospital facilities are quite sufficient for the number of the students.

I think it would be a good plan for all the graduates of the Halifax Medical College, who naturally resent this ill-informed attack on their school, and who must feel that the good character of their degree is called in question, to form a league or society to aid in the continuance and the efficiency of the College.

Dr. Birt, Halifax, ventured an opinion on one point only. He thought, since he was neither a native of the province nor a graduate of the H. M. C., and since his connection

with the teaching staff was so recent, that he might be assumed to be a fairly unbiased critic. His 23 years of professional life had thrown him in contact with men holding a great variety of medical qualifications on both sides of the Atlantic—including most of the British and Canadian degrees, and those of many of the leading schools of the United States. On retrospect he did not think that, taken as a whole, the graduates of the Halifax Medical College suffered in comparison with the work of men who came from wealthier or more famous seats of medical teaching. He had found them, as a rule, excellent emergency men, alert and resourceful, and well up in diagnosis and modern therapeutics. Recognizing fully that there are weaker brethren holding the degrees of every school, he had not found these proportionately more numerous amongst the Halifax graduates than elsewhere.

Dr. M. Chisholm, Halifax, said that opposition to the existence of a medical school in Halifax disappeared many years ago. The success of the Halifax Medical College depended upon the thorough grounding students received in the primary subjects and the excellent clinical facilities afforded by the Victoria General Hospital. The number of students was never large, and questionable methods of attracting larger numbers had never been resorted to. It would seem as if the glamour of costly buildings had blinded the eyes of the Carnegie delegates.

Dr. A. J. Fuller, Yarmouth, dwelt especially upon the advantages of small schools where there was no disproportion between the number of students and the clinical facilities. He was satisfied that the Halifax Medical College had done good work and should be maintained.

Drs. Eagar, Halifax; Kennedy, N. Glasgow; Webster, Yarmouth, continued the discussion.

A committee, consisting of Dr. Stewart, Webster, Chisholm, W. H. McDonald and the Secretary, was appointed to prepare a minute in connection with Dr. Campbell's paper, and later submitted the following, which was unanimously adopted:

"The Medical Society of Nova Scotia, in session at Yarmouth, July 6th and 7th, 1910, having considered Dr. Campbell's criticism of the Report of the Carnegie Foundation on the standing of the Halifax Medical College, finds that the Report is prejudiced, inaccurate and misleading.

"The Society considers that the best answer to the Report is furnished by the good standing and success of the practitioners who received their education in Halifax.

"The Society believes that the Halifax Medical College has proved its efficiency and that it serves a useful purpose in the Maritime Provinces and Newfoundland, and it strongly recommends that every effort should be made to ensure the continuance of a medical school in Halifax."

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