

**Address delivered at the inauguration of the Glasgow Royal Infirmary
School of Medicine on 1st November, 1876 / by John Gibson Fleming.**

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of the Royal Infirmary.*

ADDRESS

DELIVERED AT THE

INAUGURATION OF THE GLASGOW ROYAL INFIRMARY
SCHOOL OF MEDICINE,

On 1st NOVEMBER, 1876.

BY

JOHN GIBSON FLEMING, M.D., F.R.S.E.,

*Member of the General Medical Council of the United Kingdom, and one of the
Managers of the Royal Infirmary.*

GLASGOW :

JAMES MACLEHOSE, 61 ST. VINCENT STREET,

Publisher to the University.

1876.



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THE following address was intended solely for the audience of the hour. Any wider circulation of it was certainly never contemplated by the writer. But the Managers of the Infirmary having formally asked him to put it in print, so that it might become, in some measure, a permanent record of the origin of the Medical School of the Infirmary, and of the celebration of its opening, he has considered it right to comply with their request.

ADDRESS.

GENTLEMEN,—It is befitting that my first words on this very interesting occasion should be explanatory of the position which I have the honour to occupy. The practice of opening the session of a medical school by an address from a member of the teaching staff is one that has existed so long as to be now time-honoured. Had I therefore been one of the teachers of the school, the opening of which we have met to inaugurate, the circumstance of my addressing you would have required no word either of explanation or apology. But when one not a member of the teaching staff appears before you, it is quite natural that you should inquire the reason for the departure from the accepted custom. To this inquiry I shall at the outset give a reply, not only to satisfy your allowable curiosity, but chiefly because a good deal of the force of what I intend to say depends on your being acquainted with the standpoint from which I address you.

Well, gentlemen, my whole professional life has been intimately associated with this Infirmary. I look back with many fond recollections to the days I spent within its walls as a student, a dresser, a medical and surgical assistant, and my memory still often recurs to the very cases I

then saw, to the valuable practical instruction I then received, and to the warm friendships which were then commenced—friendships which have added much to the joys, and helped to soften the sorrows of life, and not one of which has ever been broken except by death. I acted for several years as one of the surgeons and clinical teachers, and for long have been one of the managers. During the whole of this period, in fact during all my life, I have never ceased to take a warm interest in the welfare and progress of the Infirmary, more particularly, I may say, in its educational department. Very important changes have been made of late years in the medical organization of the Hospital; such as increasing the number of the medical and surgical staff; extending the duration of their appointments; giving to the managers the power of making these appointments more continuous; removing all restriction on clinical tuition, so as to enable the student freely and openly to choose the clinique of the physician or surgeon from whom he thought he would derive most benefit. In carrying out these and other changes I have taken an active part; and I feel satisfied that they have had the effect of stimulating clinical instruction, and of affording to the students greater opportunities of reaping the immense field of professional knowledge which the wards surrounding us afford. Looking at the rapid strides which are taking place everywhere in the improvement of hospital instruction, I have no hesitation in saying that without these changes we would in the race have lagged behind.

When it was decided to establish a Medical School in connection with the Infirmary, a committee was appointed to consider and report on the best means of carrying out the object. Of this committee the managers did me the honour of appointing me chairman; in this way I am intimately acquainted with all the details and arrangements connected with

the establishment of the school. It was for these and similar reasons, I have no doubt, that the managers asked me to give the introductory address. I accepted the duty with great reluctance, being fully persuaded that it would have been much more effectively performed by one of your teachers. But the occasion being one that does not occur every year, involving not merely the opening of a session but the inauguration of a School, it occurred to the managers that the duty might not inappropriately be undertaken by one of themselves. Under these circumstances I was induced to yield to their solicitations, and to undertake the task of addressing you as best I could.

So much, for personal explanation.

Let us take the briefest possible historical glance at the Medical School of Glasgow. As an organized institution, it dates from about the middle of last century. Since that period it has taken an important position among the schools of the United Kingdom which have charged themselves with the task of carrying out a system of medical education. Previous to this time, the Faculty of Physicians and Surgeons, which was incorporated by royal charter in 1599 by James VI. (and which consequently comes next to the Royal College of Physicians of London, in point of antiquity of royal charter, among the medical corporations of the United Kingdom), exercised a most important influence over the practitioners of medicine and surgery in the west of Scotland. The charter of the Faculty, which was granted to "Mr. Peter Lowe, our Chirurgiane" and "Mr. Robert Hamilton, Professoure of medicine," confers on "them and their successours, full power to call, summon, and conveen before them, within the said Burgh of Glasgow, or in any other of our said Burghs or publick places of the foresaid bounds, all persons professing or using the said airt of Chirurgerie, and

to examine them upon their literature, knowledge, and practice: If they be found worthy, to admit, allow and approve them, give them testimonials according to their airt and knowledge, that they shall be found worthy to exercise thereafter, receive their oath, authorize them as accords: and to discharge them to use any further than they have knowledge passing their capacity lest Our subjects be abused”

Such was the deep and paternal interest which the Government took in the welfare of the people of Scotland three centuries ago. With all our vaunted progress and enlightenment, how different it has been for many generations, which since have passed away. Indeed it is only of recent years that the Government have been somewhat roused to the importance of discriminating, legally, between the educated and qualified practitioner of medicine and the grossest empiric; and of considering as worthy of the attention of the legislature, those evils, neglects, and abuses, which generate diseases to which so large a proportion of our population succumb. But this is a degression; let me return to the powers which were conferred on the Faculty, and inquire how that body exercised them. From the records of the corporation as extracted by my venerable friend, Dr. Weir, and published in his address on the Origin and Early History of the Faculty, it is evident that the education of medical students during the seventeenth century, and even later, was confined very much to a system of apprenticeship, similar to the system which till recently occupied so large and important a portion of the education of medical students, particularly in England.

From the records of the Faculty we learn that the apprenticeship extended over seven years, during which period the candidate was subjected to three examinations, the first at the end of the third year, the second at the end of

the fifth year, and the third "at the seven years' end ; when he passes master, and is examined on the holl particulars of his airt, of the definitions, causes, signs, accidents, and cures of all diseases perteaning to his airt, with the composition of, nature, and fit medicaments as shall be requisite." Now this test was no mere piece of formality—was not a dead letter ; the records show that it was carried out in its entirety, and that the examinations in those days were quite as strict of their kind as they are now. When we consider, then, the excellent practical system of medical tuition that was pursued in Glasgow upwards of two centuries ago—a system by which the student was taught, under the eye of an intelligent master, to observe accurately, and to diagnose the symptoms of disease, to learn the remedies most suitable to their cure, carefully to watch the effects of these remedies, and to perform the minor operations of surgery—we must admit that a system so truly practical and clinical shows that our predecessors did everything in their power to compensate for the want of what has since become the necessity and foundation of every medical school—a large General Hospital.

With such a system it is not to be wondered that the progress of medical education should expand ; but though professorships in Medicine, Anatomy and Botany, were founded in the University in 1714 and 1718, no regular teaching by lectures or demonstrations seems then to have been adopted. The illustrious Cullen was the father of our medical school. In 1745 he gave a course of lectures on the Theory and Practice of Physic, and continued to do so on that and other branches till his removal to Edinburgh in 1756. The celebrated Black, after studying here, became a professor and taught Chemistry and Medicine. They were followed by the Hamiltons and other eminent men of their day.

It was early felt that the great drawback to the progress of the school was the want of an Hospital. This became an urgent necessity, both as a means of treating the diseased poor in our rapidly increasing city, and of supplying the want indispensable to the success of our Medical School. I need not detain you with an account of the rather protracted preliminary negotiations which occurred in connection with the origin of our Infirmary. I find that the foundation-stone was laid in 1792, and that the Infirmary was opened for patients on the 8th of December, 1794, eighty-two years ago. The part of the institution then erected was the very handsome main front, with its elegant dome, comprising the eight wards as at present, and containing about 120 beds. In passing I may be allowed to remark that the plan of this part of the Infirmary, as originally built (for it has since been considerably mutilated), combined in a remarkable degree what is required for the comfort, well-being, and treatment of the patients, and for facility and economy of administration. In my opinion, it reflects the greatest credit on the architect. As far as I know, there has really been little, if any, improvement in hospital construction since that part of the hospital was built. From this comparatively small beginning the noble institution which surrounds us has gradually risen. It now contains nearly 600 beds, and, as a great practical School of Medicine and Surgery, is only surpassed,—I think I might venture to say only equalled,—by one or two of the London Hospitals.

The success of the Medical School at the University, and of the Infirmary as its most valuable adjunct, naturally led to extra-academic teaching. Very early in this century John and Allan Burns taught anatomy in Virginia Street. Thereafter rose the College Street School, then the Portland Street, all now concentrated in the Andersonian Medical School. These schools have done yeoman service in their

day and generation to the cause of medical education in Glasgow, and I am sure I only express the sentiments of the managers of this Infirmary when I say that their best wishes are for the success of all the sections of our Medical School. Let the rivalry among them be that of honourable work, each striving how best it may gain a good name and high reputation. Whatever reputation is gained by any of them, or by any individual teacher in any of them, will add to the fame of the Glasgow Medical School as a whole.

Gentlemen, having thus given you an outline of the origin and progress of the Medical School of Glasgow, and of our Infirmary, the duty which follows gives me the liveliest satisfaction; it is to inaugurate this new department of an old institution, and to welcome you all, Teachers and Students alike, to the Glasgow Royal Infirmary School of Medicine. Small and unpretending as its beginning may be, it is my cherished hope and desire that this day may be the commencement in Glasgow of a new and auspicious era in the educational history of the medical profession.

For the information of those students who have come from a distance, I may briefly advert to the circumstances which led the managers to institute a school in connection with the Infirmary. Generation after generation of students have received in these wards their first practical acquaintance with disease, and have gone forth from this place not only over Scotland, but to the ends of the earth, to combat disease with the knowledge and skill which they here acquired. Great were the advantages offered by the Hospital, and right well have they been utilized. Up till two years ago the wards were crowded with students receiving instruction at the bedside. As long as the University and the Infirmary were in the same street, there was no fear of the vast resources of the latter for

practical instruction being allowed to lie fallow. But other days came. The University moved to the west, and in its immediate neighbourhood a new hospital was soon erected. This change brought with it a new order of things to the old Infirmary; the bulk of the students necessarily followed the University, so that those left here fell short of the number to which the enormous resources of this institution could give a thorough practical education. It was hard to see the weapons in our armoury rust; hard to behold the rich and fertile field for clinical instruction comparatively poorly reaped. We are all unfortunately familiar enough with the idea of waste. The question has been raised whether nature herself makes the most economical use of her resources, but I am old-fashioned enough to believe that she does, and that any indications to the contrary arise from the fact that her plans are far too vast to be measured by our yard rule. There can be no doubt, however, that waste is characteristic of the works and ways of man; and this would have been well exemplified had we neglected to adopt any plan which was considered calculated to attract students of medicine, to pursue their studies at a school presenting such a vast and varied aggregate of disease as this hospital contains. Not that disease is so rare in this world, that we are obliged to make the most of it when we find it. This is unfortunately not the case. But by the beginner disease can only be profitably studied in an hospital, especially in an hospital of adequate dimensions. It is there that it presents itself in all its protean aspects; there it is studied and classified by competent observers. It is therefore a matter of vital importance not only to the medical profession, but to the whole community, that such institutions should be fully utilized for educational purposes. A medical school, clinical or systematic, or both, is essentially

the natural complement of every large hospital. Even from the point of view of the efficiency of the hospital itself as a curative institution, it is most desirable that the medical officers should have a large following of students in the wards. Here are the weighty words of a veteran physician, Dr. James Gregory, of Edinburgh, written at the beginning of this century. "I do not know," he writes, "nor can I conceive any human contrivance that can more efficiently and irresistibly oblige a physician to study carefully the case of his patient, to attend to every symptom, or change of symptom; to exert himself to the utmost for the patient's relief, and at the same time to be as cautious as possible in the remedies he employs; than to find himself under the necessity of giving a minute account of everything he has done in a very public manner, before a number of competent judges."

Is there any wonder then, gentlemen, that the managers saw the new order of things with regret, and cast about for a remedy? It was suggested to them that the foundation of a regular Medical School in connection with the Infirmary, on the model which has been attended with such signal success in the London Hospitals, might have the effect of gradually attracting more students to the wards. The managers at once adopted the suggestion. They had perfect power under their original charter of 1791 to institute such a school, but as they happened at the moment to be applying for some amendments to this charter, in reference to the management and financial arrangements of the Infirmary, they considered it would conduce to the advancement, permanent interests, and well-being of the school, to memorialize Her Majesty the Queen to grant her royal authority to the managers, to "afford facilities and accommodation to individual teachers for instructing students

in medicine, surgery, and the collateral sciences usually comprehended in a medical education, in addition to encouraging the clinical instruction of students as hitherto in the said Infirmary,"—the prayer of which petition Her Majesty was most graciously pleased to grant.

I have thought it right to point out the motives which weighed with the managers in determining them to institute this Medical School. What they were bound first of all to look to was the welfare of the institution committed to their care. If, however, the step which they were about to take was one calculated to be detrimental to the success of any existing institution, they were also bound to take this element of the case into consideration. But on the face of it, the step was one which appeared fitted to react beneficially on the whole Medical School of Glasgow. I feel satisfied, then, that the alarm manifested by some of the University authorities, assuming as it did a species of opposition to the foundation of this school, was the result of a shortsighted and mistaken policy. If there is any portion of the Glasgow Medical School which will eventually be benefited by the success of this new section of it, it is the University. I ought, perhaps, to qualify this statement by adding,—provided the University wills to be benefited. It is to be hoped, however, that the exclusive policy in regard to extramural teaching which has hitherto prevailed in our University is about to give way to a more liberal policy, a policy similar to that which has long existed in the University of Edinburgh, and which is admitted on all hands, both within and without that University, to have done so much to maintain and increase the high reputation of that school of medicine.*

* It is only right to mention that since these words were spoken, the University authorities have recognized the lectures of a number of the extra-academic medical teachers in Glasgow.

The constitution of the school was also a point on which sage advices were offered to the managers from the same quarter;—advices which they found themselves under the necessity of declining to accept. It was urged that the true type of an extramural school was one which would throw its arms open to the widest extent to every teacher who believed himself qualified to instruct. In this way there might have been several teachers on every branch, all competing with each other. The students were eventually to gravitate towards the most attractive centres of instruction, while the unpopular teachers would necessarily go to the wall. Now, gentlemen, the managers did not require to consider this grand scheme on its merits. They had no right to open their lecture halls and laboratories to any man who choose to enter them, and over whose conduct and bearing they could have no control. Such a system would necessarily have so limited the number of students attending each lecturer as to have strangled the school at its birth. Besides, the amount of accommodation at their disposal precluded the possibility of even trying so utopian a scheme. But I may be pardoned for suggesting that as this scheme was academic in its inception, so the Universities are the only bodies in the country which have an opportunity of showing that it is practicable. Such a scheme, in fact, realizes very fully the ideas of some of our advanced educationalists as to what a University should be. It may be some time, indeed, before it is applied even in the Universities; certainly it can never be realised any where else.

Before leaving this subject I wish to take the opportunity of thanking the managers, especially the non-medical members of the board, for the cordial and liberal manner in which they adopted and have so far carried out the requirements of the new school. Much has been done to

provide suitable accommodation. You will find the classrooms, the laboratories, and the museum well lighted, warmed, and ventilated, and quite calculated for carrying on, successfully and comfortably, the lectures and demonstrations of a large medical school, which, I have no doubt, this will soon become. Special and very complete arrangements have been made for conducting the important classes of Anatomy, Chemistry, and Physiology. For the other branches our previous accommodation was ample. In making the arrangements for opening the school, we are all deeply indebted to Mr. M'Ewen, the Chairman of the House Committee, and to Dr. Thomas, the Superintendent of the Infirmary.

So much for the past; let us now look shortly to our future duties. In addressing a few words to the Lecturers, I must at once disclaim all assumption of superiority. I will only venture on a few hints suggested by a pretty lengthened experience, and by my attention as a member of the General Medical Council having necessarily been closely directed to the subject of Medical Education.

Gentlemen, you are well aware that, for some time to come, you will require to work uphill and under certain conditions of discouragement. Especially will you lack at the beginning that cheering stimulus to exertion, which arises from a large body of students. A medical school is the growth of time. It is not to be expected that at first you can attract many students from other schools; so in the ordinary course of events it will take several years—at least four or five—before the first year's men advance from year to year, so as to consolidate and form the true foundation of our school. For some time to come then you are not likely to experience that glow of enthusiasm which a Lecturer catches from the intelligent countenances of a

numerous class. That a good teacher will make a good class is a proposition to which all will assent; but the converse is perhaps equally true, that a large class makes a good teacher. That subtle influence which radiates from teacher to pupils, and is again reflected back to the teacher,—that mysterious something which, for want of a better name, has been called “the sympathy of numbers” becomes a wonderful stimulus both to teacher and taught. But though unwarmed from such a source in the beginning of your career, you must have within yourselves a sufficient glow of enthusiasm in your subject to beget an answering ardour in your students.

It may be thought that I have gone far enough in venturing to indicate the spirit in which you should work, but at the risk of being thought even more presumptuous, I must say a word or two on the manner in which you ought to work. In a word, then, see that your prelections fairly cover the whole field of your subject, and embrace all the recent discoveries in it. You are all aware that, in regard to lectures, the question has been raised, and is now keenly agitated, whether systematic lectures are not, in these modern days, a systematic waste of time. It has been urged that they are the remnant of the mediaeval system of teaching; that they should now be superseded by the study of text books; and that to the oral teacher should be left only the practical demonstration and clinical instruction. Into the controversy I cannot now enter, but I may indicate my opinion, that no text book can rightly take the place, or subserve the functions, of the living words of an oral teacher. I am satisfied that the principles of Medicine and Surgery are more easily taught and learned from systematic lectures, especially if illustrated by such inexhaustible stores for practical demonstration as surround you in our museum and wards, than from any

books or private study. Surely the knowledge now requisite of such extensive subjects as Chemistry and Physiology would be unattainable without the guide of teachers, both in the lecture room and the laboratory.

The only other counsel which I would venture to give the teachers is this;—in teaching shun the two extremes, of dealing on the one hand too exclusively in general principles, and on the other confining yourselves to mere details. By the former method you will lecture over the heads of your students: by the latter you will cramp their intellectual powers and turn out of your school a class of practitioners untrained to reason and think, little better than empirics. Between these two extremes there is a happy mean. By all means explain first principles—generalize even to the top of your bent; but let the principles stand in relation to practical work; and in your widest flights of generalization do not lose sight of your mother earth. On the other hand, when necessary, give precise, even sharply cut rules; but never let the student lose sight of the principles which underlie them, and on which they are founded.

But it is now time that I come down from the presumptuous height to which I have soared in addressing the teachers, to the safer level of saying a few words to the students.

Gentlemen, you have elected to enter an honourable, but at the same time an arduous profession. In regard to the honour connected with it I shall say nothing; the time to dilate on that topic is at the conclusion, not at the commencement of your studies. On its arduous character, however, it is quite fitting that I should address you; not that in doing so I would discourage you; on the contrary, I wish to place some of the difficulties before you simply to nerve you to overcome them. The man who

would now scale the citadel of Medicine must be fairly equipped for the task. You are all aware that the first rampart to be surmounted is the Preliminary Examination. That difficulty your presence here enables me to assume you have already overcome. The standard required is not high; in fact it could scarcely be lower, if we intend to perpetuate the name and traditions of a "learned profession." Yet the number of candidates who fail to pass it all over the kingdom is something startling and melancholy, and clearly proves to my mind that the secondary education of the country, especially as regards the large class of private and proprietary schools, is very defective. I look upon a sound preliminary education as a matter of vital importance to the student of medicine. It broadens the basis on which the superstructure of special professional training is raised; through it alone can the student be taught to think, to analyse, to reason; in fact, to exercise aright his mental faculties.

Turning now to the special training of the student of medicine, the most obvious division of the branches of knowledge to which he must devote himself is into the fundamental and the practical subjects. The former class embraces Anatomy, Chemistry, and Physiology. Of the practical branches, Medicine, Surgery, and Midwifery relate directly to practice, *Materia Medica* is the handmaid of all three, whilst Medical Jurisprudence, which treats of the relations of medicine to the State, draws its resources from all branches of medical science. Between the theoretical and practical branches an important link of connection is formed by Pathology and Morbid Anatomy.

Reverting now to the fundamental subjects, the first in order is Anatomy. I need not tell you of what supreme importance a thorough knowledge of this subject is to every member of our profession who has his own peace

of mind and the welfare of his patient at heart. Study it thoroughly; study Medical Anatomy, without a knowledge of which the physician must be constantly groping in the dark; study Surgical Anatomy, unguided by which the surgeon's knife may be as destructive as a gun-shot fired at random; study Anatomy as a science, you will find it elevating and ennobling. In it you will find the most wonderful adaptation of means to ends, and of structure to function. The searching out and discovering how fearfully and wonderfully man is made, ought more than perhaps any other science to lead the thoughtful and reflective mind "to look from Nature up to Nature's God." In this city you have peculiar advantages for prosecuting your studies in this fundamental branch of your education. In no medical school of the kingdom have students such abundant opportunities for cultivating practical anatomy and of studying it in the book of nature. Unweariedly familiarize yourself with the work, which you will find of intense interest as soon as you have overcome the initial dislike to anatomical manipulation.

With regard to the second of the fundamental subjects, Chemistry, I need hardly say that your incursions into that vast science, which concerns itself with the constitution of all created things, must be limited and circumscribed. What you can be expected to do in the period allotted to it, is to gain a correct knowledge of the fundamental facts and the principles of the science, more particularly as they bear on Physiology, Medicine, *Materia Medica*, and Medical Jurisprudence. But this is no narrow field, and will require a good deal of hard work to cover it. Most of the examining boards, seeing that a student would be overwhelmed in any attempt to grasp the immensity of the science of chemistry, have now very properly restricted the range of examination within well defined

limits, corresponding in most instances with those I have indicated. To these, I have no doubt, your teacher will specially direct your attention.

On Physiology, the third fundamental subject, I will say little. It has, within the period of the present generation, undergone such a gradual and thorough transformation, that little now remains of what was familiar to those acquainted with it in their early days. No doubt the fundamental principles of the science do not admit of change; still the progress effected has been remarkable, and new channels are every day opening up never dreamed of by the older physiologists. In point of importance, I put this science in the very foremost place, side by side with Anatomy.

On these three, then, viz., Anatomy, Chemistry, and Physiology, the student will bear in mind that he must build his practical knowledge, and unless he lays in them a sound foundation, he can never hope to help forward the progress of scientific medicine, as distinguished from the mere empirical use of remedies.

Passing on to the practical branches, time will not permit me to notice these *seriatim*. But one word on the great advantages and facilities for the study of these subjects afforded to students at this school. To the vast resources of this hospital for instruction in Practical Medicine and Surgery I need not again revert. But I wish to take this opportunity of directing your attention to the manner in which, in my opinion, you can derive most advantage from your attendance on the several departments of the Infirmary. I strongly recommend you to delay your attendance on the Dispensary till towards the close of your studies. I well know its temptations to the young students; but it is not the place for them. The number of patients is so numerous as to necessitate rapid diagnosis, and off-hand, sometimes

routine, prescription. If the physician or surgeon has time to make any observations on the pathology of the disease, or the *rationale* of his treatment, these will generally be beyond the comprehension of the young student. Besides, many of the patients do not return; so that the accuracy of the diagnosis and the result of the treatment cannot always be ascertained. In the first two years of your hospital attendance, devote yourselves assiduously to the study of the cases in the wards. When your organs of special sense have been there trained to examine into the symptoms of disease and to diagnose it; when you have carefully watched the uses and actions of remedial agents; when you have followed the dead bodies of patients into the *post-mortem* room, and there studied carefully how far the morbid appearances explain and are connected with the diseased actions you saw during life; then, and not till then, you will be prepared to gain sound benefit from attending the Dispensary. Then it will be useful to you, and you will be useful to the medical attendants, who will gladly give you every opportunity of testing your knowledge, and of acquiring more. If thus conducted, the Dispensary instruction would be the keystone of your education as students, and fit you, more than any other part of it, to enter independently on the duties of your profession with a just confidence in yourselves.

Another great field of observation of a similar nature has for some reason or another been abandoned since my student days. I refer to the practice of the District Parochial Medical Officers. Forty years ago the advantages offered by that practice was largely partaken of by medical students. A student was in the habit of attaching himself to one or other of these officers, some of whom had in this way a considerable following of clinical pupils. From personal experience, both as a pupil, and as a parochial surgeon who had pupils, I can testify that much useful information was

imparted in this way. In the department of the diseases of children, with which every student should endeavour to familiarize himself before commencing practice, he would here find opportunities for study which he will have difficulty in obtaining elsewhere. I hope to see this field again opened up.

At the Maternity Hospital you have abundant scope for the study of practical Obstetrics, and at the Eye Infirmary for injuries and diseases of the eye. In regard to special divisions of disease, you can obtain in Glasgow opportunities of observation to the top of your desire. In the Royal Asylum for Lunatics, and at the Town's Hospital, you have facilities for the study of mental diseases. Institutions devoted to the cure of diseases of particular organs, the ear, the chest, the throat, the skin, are scattered throughout the city. I certainly do not regard favourably the multiplication of special institutions of this kind, but it would lead me too far from my subject to discuss this question. For such a delicate organ as the eye, I recognise the necessity of having a surgeon with a hand trained specially for the work, and who has made the organ a particular study. In regard to the rest, the student will find in the wards of the hospital, or in the dispensary, as much material for study of the diseases of particular organs, as will quite qualify him for treating them when he meets them in practice.

Gentlemen, I have now said so much about the local agencies which you can make available for your training in science and its practical applications, that I have left myself little time to speak of the spirit in which you ought to pursue your studies. In this respect I would say, your first and chief resolve should be throughout your whole career, as regards your mental work, to be *true men*. In studying your profession, whether by reading, listening to the opinions and views of your teachers, or by personal observa-

tion, see that your knowledge is real, not sham. Knowledge is real when you really come to understand what you are searching after, when you have clear ideas of the subject, and are able to place it accurately and intelligently before your mind. A man's knowledge is sham when instead of ideas he has only words; when instead of seeing a subject in all its essential relations, he sees it merely in a disjointed and fragmentary way; when it has never been assimilated and become incorporated with his mental nature; when in short it is merely the result of cramming his memory. If by some accident such a man happens to pass the examining board, and this may occasionally occur, he most likely will as a practitioner be a man of shifts and subterfuges, in everything but the legal title little removed from the empiric. Now, I ask you to live above such a course of life. If you cannot understand a subject, patiently work at it till light dawns upon you, which it will ultimately do; and then great will be your reward in mental satisfaction.

Your teachers will take frequent opportunities of testing the reality of your knowledge by class examinations. But after all you may manage to deceive them. If you are really in earnest it will be very difficult to deceive yourselves. As a rule an intelligent student can test himself, can take his own measure more accurately than any examiner. We hear a vast deal in these days about "plucking." To such an extent are the examining boards now rejecting candidates that the Medical Council have resolved to investigate the causes from which it arises. In no other profession does the same amount of rejections occur. In a right state of things it is difficult to find any reason why more than a very few students should be unable to satisfy the examiners. The profession is now so thoroughly organized that every teacher ought to know what the examining boards require. The boards ought to know what an average student should

fairly be expected to know; and from this mutual knowledge it ought to result that the great bulk of students should be able to pass the ordeal of examination. But such is not the case. For the present state of things it would seem that one or all of three parties must be to blame,—the examiners, the teachers, or the students. I do not wish to anticipate the conclusion at which the General Medical Council may arrive, or to detain you at any length with my own views on the question. There is one cause, however, to which I attach much weight. I have already mentioned that the study of medicine is a very arduous pursuit. The amount and variety of knowledge which a student is expected to master in rather less than four years, will put the mental and physical powers of any young man to the strain. The training for no profession or calling necessitates such continuous mental application, such devoted and varied study, as is required to enter ours. I do not say that too much knowledge is required from the student,—far from it; but I do say that the time laid down by the authorities for the acquisition of that knowledge is too short. To acquire or obtain a competent knowledge, or as it is generally called a “thorough” knowledge of Anatomy, Chemistry, Physiology, Medicine, Surgery, Midwifery, Materia Medica, and the other collateral subjects already mentioned, in four years or rather less, would try the powers of the most gifted mind in the most healthy body. This, I think, is the first point the Medical Council and the Licensing Bodies should consider. No doubt students are not obliged to limit their course of education to four years; and I strongly recommend you to extend it at least well into a fifth; but the great majority of students, for reasons which you all know without my detailing them, and also from the impulsiveness of youth, try to bring their student life to a close at the end of the present prescribed curriculum of four years. The consequence is that many of

them are very properly remitted to their studies. I have no doubt, however, that matters will soon right themselves. It cannot be that a system will be allowed to exist for any length of time by which the medical schools of the country will turn out work on which the examining boards will refuse to impress the legal stamp. But what I desire to impress upon you, gentlemen, in the strongest manner is, that by honestly and fearlessly testing yourselves—like the old warrior in coat of mail trying in turn every joint of your armour, you can reduce your chance of being plucked to the vanishing point. To yourselves be true, and you need never fear the face of an examiner.

Bear with me a moment before I conclude, while I offer you one word of warning and advice. Let me ask you, nay, beseech you, to shun the vices, the dissipations, the frivolities which abound in this and in every large city. Your youth and inexperience will be exposed to many temptations; resist them, and they will flee from you. Forget not the religious and moral precepts which you were taught by your parents and guardians, and ask the help of God to guide you in the right path. Let your recreations be innocent, manly, healthful, and intellectual, such as you can reflect upon with pleasure and self-respect. I have a thousand good wishes for every one of you, and one of them is, that throughout long, happy, and prosperous lives, you may be able to look back with unalloyed satisfaction, on the manner in which you spent your time while you were students of medicine.



