

**Introductory address to the students of the Extra-Academical School of Medicine : Edinburgh, session 1853-4 / by R.J. Mackenzie.**

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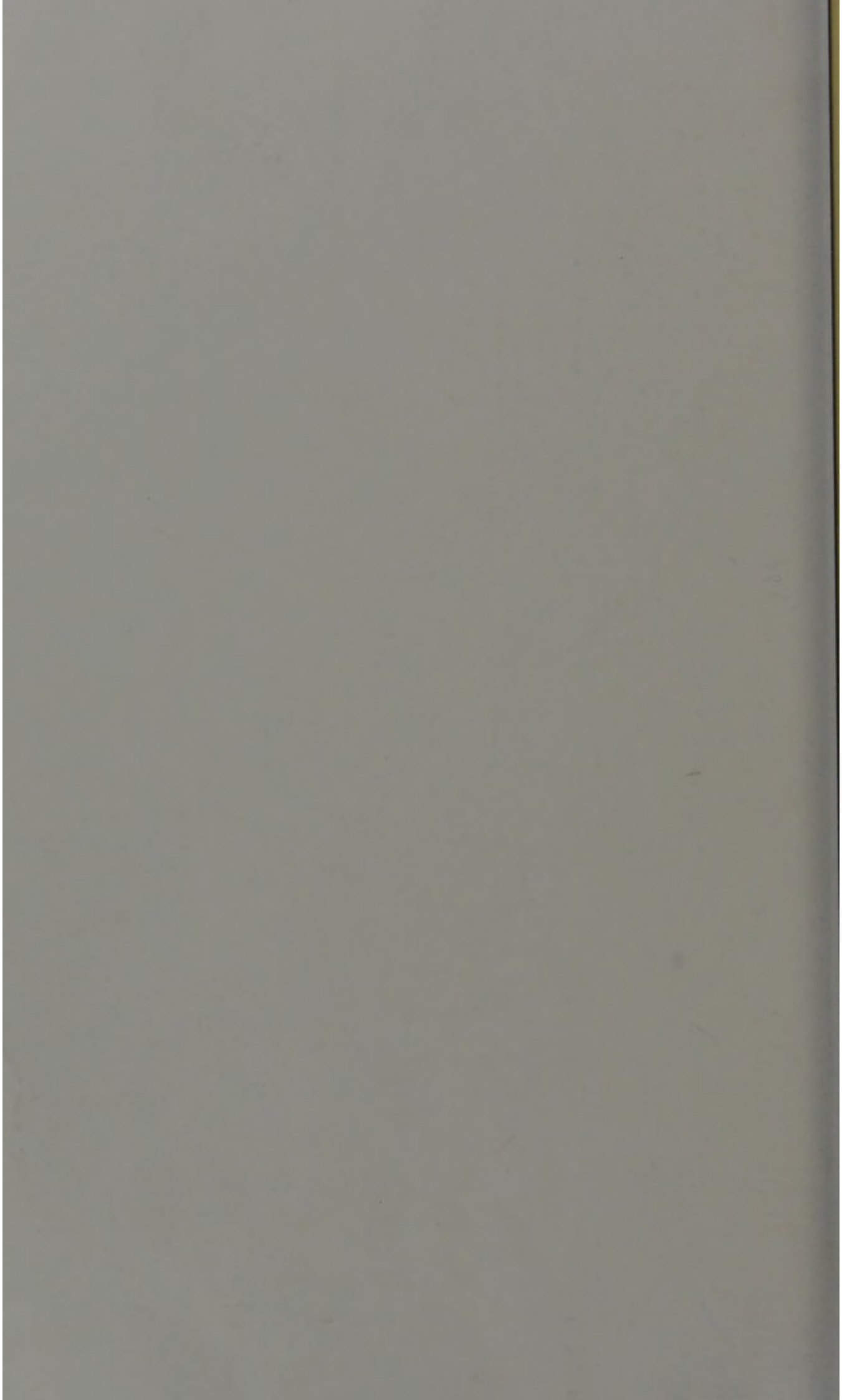
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# INTRODUCTORY ADDRESS

TO THE

## STUDENTS

OF THE

EXTRA-ACADEMICAL SCHOOL OF MEDICINE.  
EDINBURGH,

SESSION 1853-4.

BY R. J. MACKENZIE, M.D., F.R.C.S.E.,

LECTURER ON THE PRINCIPLES AND PRACTICE OF SURGERY, SURGEON TO THE  
ROYAL INFIRMARY, EDINBURGH, ETC.

EDINBURGH:

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MDCCCLIII.

INTRODUCTORY ADDRESS  
BY THE PRESIDENT  
OF THE MEDICAL SOCIETY

THE MEDICAL SOCIETY OF THE  
CITY OF BOSTON

BY R. J. MCKENZIE, M.D., F.R.C.S.,  
PRESIDENT OF THE SOCIETY

THE SOCIETY OF THE CITY OF BOSTON  
HAS THE HONOR TO ANNOUNCE  
THAT THE FOLLOWING  
MEMBERS OF THE SOCIETY  
WILL DELIVER  
LECTURES ON  
THE SUBJECTS  
INDICATED  
ON THE  
PROGRAMME  
FOR THE  
YEAR 1900



## INTRODUCTORY ADDRESS.

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GENTLEMEN,—I have been deputed by my colleagues to perform today the agreeable duty of welcoming you at the commencement of our winter's campaign, and the more responsible duty of addressing to you a few words of encouragement, of guidance and of advice on the subject of your professional studies.

I heartily wish the duty had devolved on some one more gifted with eloquence than I am, or on one more fitted from his years and experience to command your attention and respect. Zeal, however, and the desire to be useful do not require the presence of grey hairs for their development; and the difficulties and anxieties, the temptations and the pleasures of the student's life may be more keenly felt and appreciated by one, who has not so long crossed the threshold of his own professional career.

Pondering over the spirit, in which it would become me to address you, and considering anxiously how I could perform my task so as to be of any real service to you—in other words, how I could avoid making it an empty ceremony—the question suggested itself to my mind, What were my own difficulties and errors? and how, had I the same ground to go over once more, would I meet and avoid them? From the answers elicited by these questions, I trust I may have drawn one or two suggestions not altogether unworthy of your attention. There are few travellers, who have passed through an interesting country, who—if they have kept their eyes about them—cannot give those, who follow them in the same route, some idea of the journey they are about to undertake, or offer a few friendly hints as to the objects most worthy of attention on the road—the by-paths which are to be avoided, and the general mode of conducting the journey—by which they will derive the greatest pleasure, and reap the most lasting benefit.

One of my difficulties, however, in addressing you, arises from the fact that you are not all at the same stage of the journey. Those of you, however, who have already reaped the experience of some portion of the student's life, will bear with me whilst I address a few words of guidance and of warning to those, who are about to join your ranks, and who are present amongst us today for the first time.

To such I can honestly say, I heartily congratulate you on the choice which you have made of a profession. If that choice has



been your own, (as, I presume, is the case with most or all of you,) if you have come here determined to set your heart on the work which is before you, and honestly and zealously to devote your time and talents to the study of your calling, you are entering on a period, which you will perhaps one day look back to as the happiest time of your life. Enter on your work with spirit, and with an earnest and steady determination to master it, and your reward will be present as well as prospective. The very studies—which you are perhaps now looking forward to with a gloomy anxiety—will soon appear to you in a very different light. Full of interest at every step, they will lead you on in a way to which, as students of classics and of general literature, you have hitherto been strangers. The chief object of your study is man, God's noblest work; the knowledge you are setting yourselves to acquire is a knowledge of the human frame—of the laws of that mysterious principle termed Life—of the causes by which these laws are disturbed, and of the means which Providence has placed within our reach to restore and maintain them. Give your mind to these studies, and you will find that they are of the most interesting, of the most enticing kind; you will soon experience that love of your profession, which you may have often heard is so essential to your success in it. An elegant writer has remarked—“*Pour atteindre la supériorité dans un art, il faut l'aimer; pour l'aimer, il faut y croire; le plus sur moyen de rester inférieur à son art, c'est de se croire supérieur à lui.*”\*

An idea prevails, that in the elementary study of every profession, a certain amount of drudgery must be gone through, that a weary amount of dry details must be perseveringly acquired, before the interest of the study begins to be developed. If such impression exists in your minds on the subject of your elementary studies, let me give you the cheering intelligence that that impression is false, and the sooner you are free from it the better. If you begin to plod through the elements of anatomy and chemistry as a series of facts and hard names, which you must unwillingly master, if you look upon them as part of the cumbersome armour with which you are to fight that mythical enemy, which already perhaps begins to loom in the distance, your examination, then indeed you have a dreary and unenviable prospect before you. Such, I suspect, is too frequently the case. With a praiseworthy, but mistaken perseverance, the memory of the student is too often burdened with an ever-increasing accumulation of facts, which, because they have been committed to memory instead of having been studied intellectually and with interest, become oppressive, are ever apt to escape, and even if retained, cannot be applied to their proper use with that readiness, with which they would suggest themselves, had their full significance been from the first clearly looked into and understood.

\* Rostan.



Let me give you an instance of what I mean:—In studying the principles of surgery, you will learn that to secure the rapid healing of a wound, (primary union, as it is termed,) two requisites at least must be obtained; the edges of the wound must be accurately kept in contact, and the wounded part must be kept strictly at rest. These two points had been impressed on the mind of a friend of my own, a diligent and hard-working student, but one who made the mistake of carefully storing precepts in his memory without reflecting on the reasons for acting upon them. No student of his year could have told his examiners more correctly the origin and insertion of every muscle in the body, or answered more readily on any subject contained within the leaves of his text-books. When resident along with myself as a surgical clerk in the hospital, a patient was admitted one evening under his care, who had attempted to commit suicide by drawing a razor across the bend of his arm. My friend, calling his text-book principles as well as he could to his assistance, closed the wound very accurately with a number of stitches, and, to maintain the part immovably at rest, he placed a splint on the posterior aspect of the whole limb, and thus retained the arm in the extended position by a bandage. On the following morning he requested me to see the patient, who, he said, though treated *secundum artem*, was suffering severely. A glance at the arm was sufficient to reveal the absurd error into which he had fallen. On removing the splint and bandages, and relaxing the extended fore-arm, the edges of the wound lay easily in contact, and the severe suffering was at once entirely relieved. But the mischief had been done: the wound had inflamed, the severed ends of the *biceps* tendon gaped widely asunder, the exposed brachial artery gave way in the subsequent ulceration of the wound, and the life of the unfortunate man was brought into the most imminent peril.

It may be said that the mistake here committed was a very stupid one; common sense alone would have dictated more judicious treatment: it is that very principle, that invaluable quality, *common sense*, which I am exhorting you to cultivate. Sit down no longer to commit your task to memory like a school-boy, but look well into and understand what you are doing; take for your motto

“Felix qui potuit rerum cognoscere causas.”

A fact taken for granted, merely because you have heard it from the mouth of your teacher, will be very apt to lose its hold of your memory; it will never do so, if it has been riveted there by a clear perception of its full meaning and by an attentive study of its explanation.

While I thus exhort you to begin your work in earnest, let me assure you that you may do so without anxiety as to the result. You may perhaps feel oppressed when you scan the programme of the studies which are meted out for you, and which, for four years to come, you must diligently pursue before you are admitted within



the portals of the profession. You have certainly much to learn ; the field of your toil has an extensive range. But be not discouraged ; the difficulties are not insuperable (as has been a thousand times proved) to intellects of very moderate capabilities. Diligence, steadiness and a willing mind are all that is required. A short experience will teach you that, with these good qualities, what appeared at first sight laborious and difficult will soon be stripped of its formidable aspect.

Let me trust, then, that you will begin well ; the session before you is an important crisis in your life. It is a period, which is pregnant with good or evil for the future, according to the mode in which you employ it. Need I tell you that your foundation, to bear a goodly superstructure, must be built on a rock and not on loose sand ? If you lose your first year, if, in common parlance, you "take it easily," reserving your efforts for what is called the practical part of your profession, you will sow that, from which you will reap only bitter disappointment. The following year will bring subjects of study before you, for which the present year paves the way, and can alone prepare you ; and so with each succeeding year you will find that your different subjects of study so hinge upon each other, and especially so depend on the elementary knowledge which you have acquired, that, well-grounded, you will find each succeeding year increase the love of your work, because you understand it fully, whereas, if your elementary knowledge has been loosely and imperfectly acquired, you will find yourselves launched on a sea of difficulties, through which very laborious efforts can scarcely steer you safely. It is better, you may depend upon it, that a student, who has idled the time of his first session, should consider his mis-spent time a blank, and, confessing that his time has been lost, resolutely commence again, than that he should go on with studies, the import of which are to him barely intelligible from ignorance of their first principles.

But among the most important matters connected with your early studies, and which will perhaps tell more on your prospects, on your future life, than any other, are the habits you acquire during the next few months ; and this leads me to offer you some homely advice as to your mode of life, and as to the manner of conducting your studies.

The matter, which necessarily first occupies the attention of the student or his friends on coming to town, is his place of residence. I need dwell, however, very shortly on this, as it is probable that most of you have already made your domiciliary arrangements for the winter ; but a hint on the subject may be useful to some. A student who wishes to work hard, is apt to think that the best way of accomplishing his object is to live in a lodging, alone, where he will not be disturbed, and in the close vicinity of the hospital and lecture-rooms, so that he may lose no time in going to his morning class. Now, this mode of living, though a common and



apparently a favourite plan, is, I think, very objectionable. A solitary life, however devoted you are to your studies, will be but a dreary and unwholesome change from the comforts of a home and of a family fireside. If you have been accustomed to society, you will find it very hard to do without it; and you will gladly lay aside your evening's work to obtain the society of one or two of your friends and fellow-students in your rooms; or, if they do not come to you, to seek them out elsewhere.

The objection to your living in the close vicinity of your school is, that, by doing so, you are apt to lose the habit, so essential to your health, of taking regular exercise—a habit which cannot, even unconsciously, be contracted, if you fix your residence at such a distance as will necessitate your stretching your limbs at least twice a-day. The best arrangement, undoubtedly, which a student can make, is that he should live as a member of a family—*board*, as it is termed; and if he can be admitted, in the capacity of a boarder, into the family of a judicious member of the medical profession, so much the better. He has thus at his command the advice and assistance, of which he often stands in need, of one who knows by experience his difficulties, and is well able to advise and assist. The advantages of society (the domestic society of which I speak) are, I think, very considerable. There is no profession, in which some little knowledge of the world, and a habituation to its ways and to the common-places of domestic life, tells with greater advantage than in ours; and I leave you to judge whether these advantages will be best secured by the social mode of life which I recommend, or by the monotony of a solitary lodging. If, however, you choose the plan, which is most commonly adopted, of living in lodgings, the only advice which I would give you is not to live alone, but to associate yourselves with one or more of your fellow-students, in whose steadiness, and in whose congeniality of tastes and habits you have reason to trust.

The next point which you must determine is the selection of the classes which you are to attend, or, rather, their order of succession. In doing this, you have an excellent and trust-worthy guide in the recommendations of the College of Surgeons, contained in the printed "Regulations to be observed by candidates for the diploma;" and I cannot give you better advice than to adhere (with one exception, which I shall mention presently) as nearly as you can to the recommendations there given; and, in the event of any doubt or difficulty, to apply to one of your teachers, whom you will always find willing and ready to give you advice and information.

Need I urge you to be regular and punctual in your attendance in the lecture-room? I shall not waste words in insisting on the self-evident necessity of regularity of attendance; but let me exhort you to cultivate the habit of punctuality. The necessity of punctuality in the *practice* of our profession is proverbial; I wish it were equally so among students of medicine. The student who,



morning after morning, drops into the lecture-room two or three or even five or ten minutes after the lecture has begun, is an obnoxious individual; for, independently of the personal loss he sustains by so doing, he distracts the attention both of his teacher and of his fellow-students. Ample time is given you for the transit from one class to another; and, as ten o'clock is the earliest hour at which lectures are given in this school, your hours of repose will surely not be broken in upon by your attending to my recommendation in this respect.

As to the practice of taking notes of the lectures which you attend, I do not feel competent to advise you confidently; it is a matter in which the student must judge for himself. I certainly do not think that much good can accrue from copious notes of *systematic* lectures. Instead of spending your evenings in extending such notes, I think your time will be better occupied in reading on the subject of the day's lecture, comparing the opinions of your authors with those you have heard delivered by the lecturer, and noting any difference which you may find between them. Reading in advance of the day's lecture is a plan which is followed by some, and which, I think, for the young student is an admirable one. The interest of the subject is enhanced by his already knowing something of it, and he is better able to appreciate the collateral remarks and illustrations, which to the student ought to be the most valuable part of the lecture. In one department of your studies, however, I can speak with much greater confidence as to the value of notes, viz., in your hospital attendance. There, in the observation of individual cases, their history and present symptoms, and in the mode in which they are treated, you will find much that is worth recording; while from your clinical teacher you will derive much information, and many a practical lesson, which your books will not afford you, and which in after years you will be glad to refer to in your notes, and refer to with great benefit. This I recommend confidently to those of you who are about to enter on your hospital attendance; and I do so from personal experience, knowing the pleasure of referring to such notes, and knowing how much information they convey, after the lapse of at least twelve or fourteen years.

Let me say a word to you on the subject of your evening studies and occupations. Do not set out with the prevalent idea that a student, to be diligent, must turn his night into day—must be found poring over his books at one or two o'clock in the morning. There is one class of students, those who are preparing for their approaching examination, whose anxiety on the subject will cause them, I suspect, to turn a deaf ear to the advice to close their books before midnight. You may depend upon it, however, that the advice is sound; and, homely as it is, I would wish to impress it on the minds of my junior listeners. It only requires a little method for you to commence your studies early in the evening,



and you will find that three hours, well occupied, will amply suffice for the reading you require. If you accustom yourselves to late hours, if you habitually sit

“Till on the drowsy page the lights grow dim,  
And doubtful slumber half supplies the theme,”

you will lose the energy which is so essential for your morning's work; and experience tells, that slumbers, no longer doubtful, will seriously interfere with your appreciation of the afternoon lecture or demonstration.

The mention of your evening's occupations leads me to speak in more serious mood of a subject, which I could wish to avoid. Each succeeding year, however, repeats the oft-told tale of exposure to temptation and its too frequent consequences, squandered time, reckless thoughtlessness, dissipated habits. Time was when these things were much more common than now, when the name of medical student was almost a by-word of reproach. Matters are altered now, when the public know that the great mass of our students are amongst the best-informed and most highly educated young men of their day; but exceptions still too frequently occur. I have myself witnessed with sorrow the gradual allurements to the ways of intemperance and reckless folly of not a few young men of the highest promise, who commenced their career with hopes as high, and with intentions as good, as can actuate the mind of any one who now listens to me. Had I the eloquence of my friend Dr. Maclagan, I would warn you, as impressively as many of you remember he did in this place two years ago, of the dangers which you run. But I will content myself by simply entreating you to avoid the beginnings of these things; for, what appears to you now as possessing no temptation for you, may almost unconsciously lead you into those habits, which have proved the stumbling-block and ruin of many; and to this advice let me add a single fact, the result of my own observation. I can recal to my recollection not one or two, but twelve or more of my college companions, who fell into habits of thoughtless dissipation. Shall I tell you what has become of these men now? With but one or two exceptions *they are dead!* Unavoidable exposure to contagion, hereditary delicacy of constitution, the sun of India or the vicissitudes of our own climate have swept them off as an easy prey. Remember, then, while I urge no higher ground against this sad vice, that your profession is one, which is, to a certain extent, attended by risk to life, and that that risk is a hundred-fold increased, is converted almost into certainty, by the miserable species of self-indulgence against which I would have you carefully to guard.

Do not imagine, however, that I wish to exhort you to lead the life of an anchorite, or to eschew amusements of every kind. Physiology will teach you that long continued exertion of a muscle without relaxation will cause that muscle to lose its tone and power; and



so, we all know, is it with the mental faculties; they must not be over-taxed, or kept too long on the stretch, or they will lack the freshness and vigour, which a moderate and well-timed relaxation will give them. The rule, which I would have you steadily to follow on this subject is one, which, common-place as is the advice, is of much import as regards your comfort and success through life; that is, to adopt the household word of "business first, and pleasure afterwards." Up to the period of sixteen years of age, or thereabouts, I suppose, we have all had this precept in vain rung in our ears, as far as our own wills were concerned. Who ever saw the school-boy, whose mind could be absorbed by the beauties of Virgil or Homer with a cricket-match or an afternoon's fishing in close prospective? Now, however, the aspect of your studies is changed, and your inclinations must and certainly will undergo a corresponding alteration. You have now a distinct and tangible motive to work steadily, for the fact looks you in the face, that your success in the world, your position in society depends from this day forwards on your own exertions. Unless you appreciate this, if you still feel that your amusements, as in school-boy days, are the first object, before which your studies stand as a task to be got over, be assured that your years of discretion have not yet proclaimed their advent, and you had better wait yet a while, before you enter on the acquisition of that knowledge, which is so entirely essential for your well-being and success in life. You will have ample time for relaxation from study. One day at least in the seven must be a day of rest from your occupations, and, I think, you may safely (except perhaps towards the termination of your studies) devote the greater part of a second day (the Saturday) also to relaxation. Diligent occupation of the other five days of the week will increase your *zeal* for this repose from your work, and you will enter on your studies after it with fresh vigour and with renewed pleasure.

There is one period of relaxation in your winter session, which, time-honoured as is its institution, experience has proved to be rather a misfortune to the student—I mean the Christmas holidays. Every teacher of a few years' standing knows how often the idleness of the Christmas week has given a check to the vigorous exertions of the young student, and a check to the steady and industrious habits which he had formed. These holidays, attached as we all are to them by early associations, come at an awkward time of the student's year, when he has little more than fairly entered on the spirit of his work. So much are the evil effects of this break felt, that I have more than once heard the remark made by teachers, that they have found the work done in their class in the two months preceding Christmas greater than that of the four months which follow it. Though my own observation does not lead me quite to this conclusion, I am well aware of the danger to the young student which this period involves, and I would wish to warn you against it. I am not so unreasonable as to advise you to break in upon the



sanctity and enjoyment, or to discard the relaxation and amusements of Christmas and New-year's day ; but I would advise you not altogether to idle away the intervening week, and thus to break in upon the industrious habits you have acquired, nor to consider it absolutely necessary to "bring in the New-year" in a way in which you would be ashamed to spend it.

And now let me address a few words more specially to our former friends and pupils, (many of whom we rejoice to see amongst us again to day) those who have already had some experience of the matters of which I have been speaking, but who, I hope, will not despise a few hints for their further guidance. But here, gentlemen, the mention of our former pupils brings a sad event to my recollection, and I am tempted not to omit a passing word of tribute to the memory of one, a very distinguished pupil of this school, endeared to many of you, as he was to myself, over whom the grave has closed since we last met in this place ; one, who left us at the close of last session in the prime of his youth, in the full vigour of his days, bearing with him the highest honour, which, as my own pupil, he could have obtained. We had scarcely parted with him, ere he was cut down by sudden and fatal illness—another of those blighting strokes, which ever and anon occur, bringing almost unbidden to our minds the simple but thrilling words "as a flower of the field, so he flourisheth ; for the wind passeth over it, and it is gone, and the place thereof shall know it no more." I mention not the name, gentlemen, of Patrick Samuel merely to excite your sympathy ; but I mention him as an example, and as the brightest example with which I have yet met, of what a student really ought to be. Modest and unassuming, he gained the esteem and admiration of his teachers, and, I am sure I may say, not less of his fellow-students ; with good abilities, and with an ardent love of the work in which he was engaged, he swerved not to the right nor to the left in the path which he had determined steadily to follow. His success as a student, his attainments, his industry were but harbingers of the success of which his future career in life gave promise—earnests too, let us trust, of that higher reward, which has been promised to him, whose talents are not buried in the ground, but are zealously employed in the performance of his duty.

While, gentlemen, your studies have now a wider field, and whilst each year gives you a more distinct view of your profession, as you will have to practise it, let me advise you not to lose sight of the ground you have already gone over. You perhaps think that the advice is superfluous, for you are fully aware that your day of probation necessitates the same knowledge of your first as of your last year's subject of study. But what I wish to caution you against, is believing that your acquired knowledge is safely laid in store against the day of your examination. The next few days, if you spend part of them in the dissecting-room and the chemical



laboratory, will show you that your stores are of a more or less volatile nature, and will require frequent replenishing. You must *keep up* the knowledge you have acquired by an occasional revision of your past studies, and thus avoid the wearisome, laborious, and uncertain task of what is commonly called *getting it up*, as the day approaches, when it will be required.

I have said that you have a trust-worthy guide for the arrangement of your studies in the regulations of the College of Surgeons. In one particular only would I have you to deviate from the recommendations there given. Twelve months is the period there mentioned as the time allotted for the study of practical anatomy; but I would advise you to spend more time than this in acquiring a thorough knowledge of human anatomy, without which you will in vain attempt to attain to honourable distinction in any branch of your profession. I would have every student to commence dissection within six weeks of the commencement of his studies; and, if possible, so to arrange the time of his second, third, and fourth years, that daily, throughout the entire period, he may spend two hours (and, if possible, two continuous hours) in the dissecting-room. In after years you will have extensive opportunities of furthering your knowledge of much of what you have come here to learn; but it is very improbable that many of you will have the leisure, and still fewer the opportunity of acquiring that knowledge of anatomy which is so all-important to you, and which is to be acquired in the dissecting-room, and there only. Perhaps your ambition does not point to surgery as your field of action, and you think that therefore it is not so essential that you should be a thorough anatomist. I shall say a word presently on the exclusive practice of surgery and the other branches of medicine; but let me assure you, that, superficially acquainted with anatomy, you will prove but a poor disciple of the healing art in any of its departments; you will practise your profession *successfully*, perhaps, as the public call it, but in reality empirically and without confidence or comfort.

Anatomy is one of the subjects which you must learn here, and on which you need not bestow very much of your attention at home. Beware of those elegant manuals, richly supplied with beautifully executed woodcuts; you will never learn your anatomy from such sources. These books have their value as guides at the dissecting-table, and in refreshing the memory of him who has been a diligent dissector, but let them only be used in this way. I speak feelingly on the subject; for I well remember the labour it cost me, when a young student, to unlearn in the dissecting-room much of what had given me no small labour to learn at home.

I remember a circumstance, which struck me forcibly at this period of my studies as to the necessity of diligent dissection. A very eminent and much esteemed physician of this city, with whom I had the good fortune to be intimately acquainted, the late Dr.



Davidson, in advising me on the subject of my studies, said, that the loss of his knowledge of anatomy was a constantly recurring source of annoyance to him in practice. (He practised purely as a physician, and was between fifty and sixty years of age.) So seriously indeed did he feel this deficiency, that, at his request, I procured an entire set of bones for him, and with his manual of anatomy before him, he set to work on the skeleton with all the zeal of a young student. After spending some weeks in diligently studying the bones, he next procured a folio volume of plates of the muscles, nerves, and blood-vessels; but his energy now very soon began to flag, and with unfeigned expressions of regret that his professional avocations would not allow him leisure to dissect, he presented me with his anatomical plates, adding that books and pictures alone could not teach anatomy. The gift too was burdened with the condition that I would make no use of the plates, till I had carefully dissected everything which they depicted.

If the want of anatomy was felt by a physician of such acknowledged reputation, surely I need say little of its necessity for the general practitioner, and as well might I dilate on the absurdity of an engineer practising his profession with little knowledge of mathematics, as on that of a surgeon following his vocation meagrely instructed in anatomy. A lively picture of such a surgeon, on the eve of an embarrassing operation, is given by John Bell, one of the most shrewd and observant surgeons, and one of the most powerful and sarcastic writers of his day.

"How," says he, "must he tremble at the thoughts of what he has to do! Faltering and disconcerted! Hesitating at every step! Acting only as he has seen others act, he is interrupted, startled, perplexed with every new occurrence. He has foreseen nothing, provided for no accident, and every accident alarms him. He moves fearfully and timorously forwards like a blind man, who walks with an air of confidence on an accustomed road, but when any new object presents itself, or the road is changed, is bewildered and lost."

The senior student, in prosecuting his studies, is very apt to fall into an error, against which it behoves him to guard. He finds, perhaps, that one of the practical departments of the profession is more suited to his taste than the others, and he cultivates that taste by devoting his attention to his favourite subject to the too great exclusion of other matters of equal importance to him. To a certain extent this will always be so, and to a certain extent, perhaps, the tendency need not be discouraged. But beware of allowing it to carry you too far. The first inconvenience which may result from this error is your rejection by the board of examiners. You will find no allowance made there for your tastes and inclinations, where your proficiency in every department will be equally weighed in the balance. But of far greater importance than this is the effect which a too exclusive attention to one or other branch may have on your future professional success. Be not misled by the high-sound-



ing titles of *pure physician* and *pure surgeon*. It may happen that in after years a few of the many may be placed in such a position as to be able to choose the path of practice, to which their tastes and ambition point; but be assured of this, to obtain not eminence but mediocrity as a physician or as a surgeon, you must have qualified yourselves practically as both. Ignorant of the one or other branch of the art, you will inevitably commit errors, which will cause the finger of scorn to be pointed at you. The world, I assure you, has little mercy on the man who commits such errors, and it is slow to appreciate the nice distinctions between surgery and physic. A stiff joint, from fracture or dislocation, is held as a perpetual disgrace over the head of the physician who has lucklessly, and without thinking the injury of sufficient gravity to require the aid of the surgeon, pronounced it to be a strain or a bruise. Nor does the surgeon fare better, who, in the treatment of external disease, fails to detect, and consequently neglects to treat those internal complications, which so frequently arise, and which it is of so much importance to recognize at their outset. In few situations in life have medical men any choice; they must be prepared to treat disease, and to remedy the effects of injury, of every form. The provincial practitioner must form his own judgment, and be ready to act with the same decision as an operative surgeon, as he will be called on to do in the treatment of internal disease. In the public services of the army and navy, no provision is made for deficiency of ability on the part of the medical officer, for the performance of his duties as surgeon or as physician. He must combat the ravages of an epidemic in camp and hospital, with the same energy which he must display as a surgeon in the field of action.

It would not be difficult to depict imaginary scenes, in which a medical man, ignorant of surgery or midwifery, must play a painful and humiliating part; but let me give you an instance where imagination is not required. Shortly after I had obtained my degree, when travelling by sea, and whilst sitting at dinner in the saloon of the vessel, the stewardess appeared, and urgently demanded whether a medical man were on board. Having instantly responded to the call, I was conducted to the ladies' cabin, where I found, to my dismay, that my services were required in behalf of a lady, who was threatened with immediate premature labour. On putting a few questions to my patient, my confidence was not restored by finding that she had nearly been lost from hemorrhage on a former occasion of a similar kind. Had an accident occurred requiring prompt surgical assistance, I should have considered myself fortunate to have been able to render my services, and to have had an opportunity of giving proof of my capabilities; had the attack been one of apoplexy, of hæmoptysis, of cholera, I should probably have done all that was required. But the case was one of a kind, of which, to my shame be it said, I was practically entirely ignorant; for all the obstetric knowledge which I possessed was



of that evanescent kind, which is acquired by a few weeks' reading, and which had served, aided by the forbearance of my examiner, to procure my degree.

Fortune, however, in this instance, favoured both my patient and myself; for a large opiate, which I procured, arrested the symptoms, and, with feelings of thankfulness, on the following day I handed over my unwelcome charge to her friends, and—received their grateful thanks for my valuable services.

I am not ashamed to say that I profited by the lesson. On my return home, I took the opportunity, which will be amply afforded to you all, of learning something practically of what I had no intention of ever practising in my profession, but ignorance of which, experience had taught me, might be productive of serious consequences.

Again, let me relate to you an instance of what, I suspect, is much more common—surgical incapacity—from a scene, in which an intimate friend of my own took part, which occurred in one of the last campaigns, in which a large British force was engaged. Late on the evening of a severe action, the period at which so much depends on the skill and energy of the surgeon, my friend was actively engaged in performing the necessary operations, and otherwise attending to the wounded of his own regiment, when a young surgeon, with quivering lip, and clouded brow, came in to beg a word of him. “My dear fellow,” he said, “here’s a bad business! Five or six of my men have been brought in with their limbs shattered by round-shot. What’s to be done?” Immediate amputation was suggested as the course which must obviously be followed, and a familiar mode of instilling a little courage into the faltering heart of the young surgeon was hinted at as a preliminary measure. The latter part of the advice, he hopelessly replied, had been already acted on; but, as to performing amputation, the simple fact was, he dare not do it, for he had never paid any attention to operative surgery. “Then go to bed, and take care not to let yourself be seen!” was the sound but humiliating advice given by my friend, who took the duty on himself, and than whom no one was better qualified to perform it.

Let me advise you, then, not to neglect the opportunities which you now have, of informing yourselves thoroughly on all the subjects which form your curriculum of study; for, let me repeat it, there are very few, who will not be called upon to practise each department, and even those few will scarcely fail, sooner or later, to incur just and galling censure, when they find themselves involved in some of the difficulties to which I have alluded.

Another temptation exists, which may perhaps lead you into the error against which I have been now warning you. A custom prevails in this school, as in most others, of awarding prizes to the pupils, who distinguish themselves most highly in competitions of skill and knowledge. The practice, I myself think, is a good one;



but it is not without its danger. If you concentrate your energies on one subject of study, and devote your time to acquiring such a knowledge of it as will serve to outstrip your competitors; if you do this to the exclusion of other matters of equal, perhaps of greater importance to you, your time will be badly spent, and the gratification, which you or your friends may derive from your having obtained the object of your ambition, will be but a paltry recompence for the loss which such a course will cause you to sustain. I have heard this argument loudly urged against the system of awarding prizes; and if I observed one pupil of my own following the imprudent course of which I have spoken, I would be the first to discourage the custom, which otherwise, I think, is attended by many advantages.

Let me caution you on one more subject, and I shall detain you no longer with "words in season." A few years ago the student of medicine was taught to observe with his unassisted senses what he could see, hear, touch, and handle; and it was thought sufficient if he observed what he saw and heard, and if he remembered what he observed. The recent introduction, however, into more general use of minute examination of structure by means of the microscope, opened up a wide field of research to the anatomist and pathologist, and consequently a wide field of observation to the student of medicine. To cultivate the acquisition of this species of knowledge to a moderate extent is very desirable, indeed it is absolutely essential to every well-educated medical man. But to cultivate it immoderately is to raise a stumbling-block, on which many a student has tripped, and over which some have fallen. To be able to distinguish by the aid of the microscope the minute structure of the different textures of the body and of the blood, the morbid products of inflammation and of mal-assimilation, is a matter no longer of choice but of necessity to the medical man. But beware of allowing your search after this kind of knowledge to divert your attention from what is of equal, indeed of far greater importance to you, viz., anatomy, both healthy and morbid, as you see it with the naked eye. I have heard of a student, who had an intimate practical acquaintance with the minute structure of bone, but was at sea when asked to demonstrate the different processes of the thigh-bone or pelvis,—who was learned in cartilage-cells and corpuscles, but who knew nothing of the physical signs of the different diseases of joints; and I have many times heard warm discussions on the presence or absence of true cancer-cells in a tumour, by those who cared not to inform themselves of what was of much greater importance, the tangible signs by which the true nature of the same growth might have been distinguished before its removal by the surgeon's knife. I have heard the remark made by a very eminent London surgeon, one who is far from under-rating the value of the microscope, that the time and talent which were *wasted* on its use among young men of the présent day was lamentable. Whence, do you think,



did Mr. Syme or Dr. Simpson acquire that power of accurate diagnosis, which they are so well known to possess? Not, certainly, from the use of the microscope, but from the diligent use of their own natural and unaided powers of observation. Instruct yourselves in microscopic examination of structure by all means; you must do so to enable you to keep pace with the modern advance of medical science; employ your leisure hours with the microscope if you will, but beware how you allow its use to allure you from the observation of what common sense tells you are more essential matters.

And now, gentlemen, in conclusion, let me say a single word on the ultimate object of the studies which you have come here to prosecute.

The profession, of which you have made choice, is one which involves very serious responsibilities, and it will be well for you to cast an occasional thoughtful glance towards the future, and to think of the serious nature of your calling. On the conscientious employment of the opportunities of instruction which are now afforded you, and on your diligently following up hereafter the lessons you now learn, will depend much of the worldly happiness, and oftentimes the very existence of those, who put their trust in you in their day of need. It is true, "the issues of life and death are in the hands of the Almighty," but do not shut your eyes to the fact that you are something more than a mere passive instrument in the hands of Providence, and that talents are now being entrusted to your keeping, for which you must one day give an account. The question, too, of your own happiness, of your worldly prosperity, of your future position in society, is involved in the course you now follow. A royal road, it is too true, has now and then been found to worldly prosperity by ignorance, masked by impudence, and the path is occasionally trodden in our own day, and with too much success, by empiricism in various shape, clothed in the garb of science. Against such courses I would be ashamed to waste time in warning you. Diligence, perseverance, and a manly integrity of purpose will assuredly bring the reward which they deserve. Cast your eyes around you, and mark those, who occupy the highest ranks in medical science, those most highly esteemed in our profession, and you will see that birth, connexions, and interest have not the sway in our profession, which they have in some others; and that it is worth, and worth alone, which can command respect, or lead to honourable distinction.



And now, gentlemen, in your hands, let me say a single word on  
 the subject of the student which you have come here to  
 prosecute.

The profession of which you have made choice is one which  
 involves very serious responsibilities, and it will be well for you to  
 feel an earnest thoughtful study towards the duties and to think  
 of the serious nature of your position. In the course of your  
 education, the opportunities of instruction which are now afforded  
 you and of your diligent following up, however the lessons you  
 now learn, will depend much on the quality of your studies, and these  
 these the very essence of them, you put that trust in you in their  
 day of need. It is true, "the power of the soul death are in the  
 hands of the Almighty," but do not let your eyes to the fact that  
 you are something more than a mere creature, instrument in the  
 hands of God, and that what you are now doing is intended to  
 your benefit for which you must not give an account. The  
 question for you now arises, as your worldly property, of  
 your future position in society is decided in the course you now  
 take. A good rank is a high rank, and a low rank is a low  
 a worldly property by generous, washed by independence, and the  
 good is essentially noble in our own day, and will be made the  
 for us important in the eyes of God in the eyes of men.  
 A good and happy I would be obliged to receive to be worthy  
 you. Diligent persistence and a steady industry of purpose  
 will usually bring the result which they desire. Let your  
 eyes be fixed on the noble and the high, the highest results in  
 your world, and make those who occupy the highest ranks in  
 medical science, those most highly esteemed in our profession, and  
 you will see that their manners and interests have not the way  
 in our profession which they have in some others; and that it is  
 worth, and worth doing, which can command respect, or lead to  
 honorable distinction.







