

Introductory address, delivered to the students of S. Mary's Hospital, 1st October, 1874 / by Edmund Owen.

Contributors

Owen, Edmund, 1847-1915.
Royal College of Surgeons of England

Publication/Creation

London : C. Mitchell, 1874.

Persistent URL

<https://wellcomecollection.org/works/af85yedw>

Provider

Royal College of Surgeons

License and attribution

This material has been provided by This material has been provided by The Royal College of Surgeons of England. The original may be consulted at The Royal College of Surgeons of England. where the originals may be consulted. This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

226 3

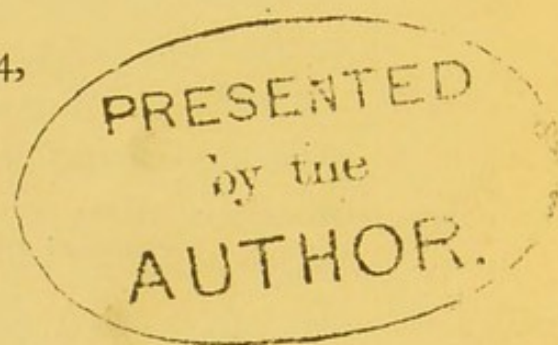
INTRODUCTORY ADDRESS,

DELIVERED TO THE STUDENTS OF

S. MARY'S HOSPITAL,



1st October, 1874,



BY

EDMUND OWEN,

M.B. (LOND.), F.R.C.S.,

ASSISTANT-SURGEON TO S. MARY'S HOSPITAL AND DEMONSTRATOR
OF ANATOMY.

LONDON:

C. MITCHELL & CO., RED LION COURT, FLEET STREET.

1874.

LONDON:
PRINTED BY C. MITCHELL AND CO., 12 AND 13, RED LION COURT,
FLEET STREET.

"Law and Medicine should be very serious professions to undertake. People's lives and fortunes depend on them."

GEORGE ELIOT.

FELLOW-STUDENTS OF MEDICINE,

Upon this, the first day of a new medical year, I find myself charged with the pleasant, yet highly responsible, duty of giving you a formal introduction to those studies whose better acquaintance you seek to make. To many before me I know such an introduction has already been offered. It will be my endeavour now to show you, one and all, how to make the most of golden opportunities so as to become skilful workers of the healing art, and of the greatest use and comfort to those who will hereafter find themselves in need of your services.

I shall, moreover, take this opportunity to direct your attention to certain subjects which I consider to be more or less inseparably connected with your technical education.

To those gentlemen who may be here to-day as visitors and friends of the school, on behalf of my colleagues and of myself, I bid welcome; and also on my own behalf beg their indulgent attention for a short time.

But before proceeding with my subject, I would like to express the great loss which we must all feel that we have sustained in the early death of our fellow-

student Schlesinger. He was a man well-informed, always ready to help, and most devoted to his profession. Indeed, I think we may say of him that he loved not wisely, but too well!

It may not be inexpedient that I should attribute my occupying this honourable position to-day to the fact that most of my senior colleagues have already held it on previous occasions; and I would, indeed, that I could also ascribe it to the result of that natural process of selection known as the "survival of the fittest!"

But in that I have so lately passed from the position of learner to that of teacher *and* learner, I feel myself somewhat favourably placed by attendant circumstances for addressing you on matters which concern our mutual welfare.

At the present day, when every institution is critically examined, and ruthlessly destroyed if not found to be bearing sufficient fruit, the "Introductory Address" can hardly expect to escape questioning. For my own part, I look upon it in the light of an earnest appeal to men upon the eve of an important event, in which the individuality of each must declare itself, as was that most memorable address delivered nigh three hundred years ago at Tilbury Fort.

But granting that it does fall short of its original design, I should be loath to see it as carelessly abandoned as the Ministerial whitebait dinner, or any other time-honoured custom introduced by men as clear-headed and honest as those of our own time.

Having said this much by way of preface, let me assure you that, unless this year's entry of medical students is a total exception to that of every other

year that I have known, not a few of you have committed a grievous error in throwing in your lot with us to-day. It is a sad thought—and one which I would have liked not to have uttered—that some few of you, it may be fresh from school, or, at any rate, too soon your own masters, will, from sheer idleness, or from an utter want of conception of the height of this your supposed calling, spend your time and energies without the slightest benefit to yourselves or to any one else, but, as sickly sheep, tending to spread infection through our little flock.

Occasionally we hear such an one plead, as an excuse for his folly, that he never wished to enter the profession, and was never consulted upon the subject.

I can well understand a father's great desire that a certain son should succeed to his practice and help him in his increasing years, but I cannot see in the future aught but disappointment if against his inclination the young man is sent to study medicine.

It may be that the son, on arriving at years of discretion, or even before that time, saw that money could be obtained with much less physical and intellectual effort in commerce, or that his taste was for law or the sea.

I am sure that to become a doctor a man must be born with a taste for the art, just as much as a poet must for his. Paying his fees at a medical school can never insure his being made a doctor.

Supposing, then, that, from one cause or another, the next few years do not produce such results as we may reasonably expect, you will find good-natured friends showing you where you have failed. It is for

me to-day to point out to you where errors may be committed unless guarded against.

But in case you may not be able to carry away all the good advice which I am about to pour into your attending ears, at least bear this in mind, that we, your tutors here, will at all times be ready to supplement or improve upon what I may say to-day, so that as unforeseen difficulties arise, you may at once obtain that information which our experience can afford—and if you wish to work on in the right way, it is absolutely necessary that you should know how to start.

For the next three or four weeks we shall find you very eager in your duties, and fancying in your ardour that the day is hardly long enough for all you have to do, having recourse to the midnight oil. We shall find you regularly taking up your position in the front rows of the lecture-theatre, and employing the rest of your time in diligent work upstairs, or in attendance on hospital practice.

Then will come the reaction. Attendance on lectures you will discover to be irksome. Dissecting will no longer have any interest (useless, uncongenial drudgery as it is!), and that you can learn with much less inconvenience from your text-books, and at your own fireside—for this reaction we may expect with the chilly weather of shortening days. Fortunate shall we be if it lasts no longer than they.

Now, lest a casual observer should think this your mental condition to be somewhat at variance with a prospect of future success, you will assure him that you have, withal, a decided taste for your profession—

it may be hereditary—that being of an advanced and practical nature, your greater enjoyment consists in seeing patients, and listening to clinical instruction.

But do not imagine that the bare fact of having already acquired the faculty of diagnosing a case of bronchitis, or of writing a dog-Latin prescription, is subject for congratulation. I shall rather make it the occasion of a twofold caution, first as regards that excess of zeal to which I have just alluded, and then as regards your having attempted to commence your profession at the wrong end, a mistake of which the gravity can hardly be over-estimated, and one which I have often known to be fatal to a favourable issue.

You are to-day in the position of men about to start upon a four-mile race, and, like them, I trust, stripped of all surroundings which might diminish your chance of success.

You may not be able to see the goal, but you know well that the course clearly marked out, and often traversed by others, will lead you to it. Attempt not too great a pace at first, lest you be gradually overtaken and passed; and lest, much of your energy thus squandered, you may with difficulty be able to reach the post.

Is it necessary for me further to pursue my *simile*; to speak of that man who, from culpable ignorance, or wilfulness, refuses to take the course indicated, or who starts from the other end?

That “little knowledge” which you may have obtained before entering at a Medical School may, indeed, prove to be to you a “dangerous thing,” for, fancying that you know more than your fellows, you may be

disinclined to follow that educational path which you may consider proper enough for them. Thus, for my own part, I am very glad to find that the old system of apprenticeship and medical pupilage is dying out, for I take it to be most hurtful that the student should attempt to learn medicine and surgery before anatomy and physiology, or that a mere boy should be pushed into a surgery to spend his time in making up medicines, and to find himself gradually entrusted with the care of what his instructor is pleased to call "pauper" patients, when he ought to be at school, or occupied with the study of natural science.

Surely such a course, instead of tending to the development of his intellectual faculties, must rather induce in him an improper estimate of the grandeur of the medical profession, and an unsympathetic regard for those of his fellow-beings whom poverty has been cruel enough to place at the mercy of his speculative skill.

The whole system of unqualified assistantship requires investigation.

If the fitness of any man for the practice of his profession is to be determined by examination, is it right that the student who has failed in his professional training, no matter from what cause, should be allowed to take charge of those who are least able to help themselves—the poor?

I am well aware that the remuneration received by the parish doctor is often so shamefully out of all proportion to what the guardians require of him, that it becomes impossible for him to keep a qualified assistant. But I also know that it is not without its preju-

dicial effect upon the idle student to feel that, however much he may come to grief in his hospital career, he will, nevertheless, be of a certain definite value as an "unqualified" assistant.

But to return to the subject of work. As many words will be strange to you in your new studies, it will be wise to invest in a small dictionary of medical terms. The book I would recommend is Hoblyn's, which, though far from being complete, will afford you all the information that you are likely to require, and may not like to ask for.

Let all your work be done with system. Make up your mind, for instance, to read over the subject which your lecturer is treating before you enter the class-room; and, taking short notes of such points as you do not understand, make it your next business to inform yourself of them, either by questioning or by further reading. I do not advise you to take full notes of every lecture and demonstration, for in so doing you will be sure to miss much of what is being said, and more of what is being shown, whilst the more copious and crowded your notes, the less likely will you be to wade carefully through them when you get home—at least, that was my experience.

Make it a rule to read a certain amount each day; and, if you have not already acquired the habit of reading what may be called heavy literature—a relative term—the sooner you do so the better.

You may find it hard work at first, or, rather, later on, when your studies are losing the charm of novelty; but by forcing the intellectual faculties into gentle work, little by little, and day by day, you will, by-and-

by, find them completely at the disposal of your will. And when you become, as assuredly sooner or later you will, completely wearied of any one subject, put it aside for a time to work at something else ; or, if desirable, give up work altogether. For it is very wrong to make yourself a party to a system of deceit upon your intellect by sitting, as many men do, hour after hour with an open book in front of them, whilst their thoughts are—who can say where ?

It may be extremely agreeable thus to find ourselves lulled into a kind of intellectual doze, allowing the consciousness of what we ought to be doing to act as an inoffensive, half-toned background for the better display of our erring imagination. But this is not reading. And on such occasions it is well to submit to a kind of penance by “trying back” and re-reading one, two, or more pages, according to the magnitude of the offence.

Dr. Carpenter justly says that the greatest economy of mental labour exists in working vigorously when one feels disposed to do so, and in refraining from exertion, as far as possible, when it is *felt to be an exertion* ; and he is equally correct in saying further on that this rule is by no means of universal application. For there are many individuals who would pass their whole time in listless inactivity if not actually spurred on by the feeling of necessity—and certainly men should work from higher motives than this.

From our earliest childhood we have been directed to learn from the bees as best embodying true business notions ; but we are now informed that they do not improve the shining hour from an innate love of work,

but, like many men, from an instinctive knowledge of the certainty that unless they work hard at the proper times they will fare badly in the future. For it was found that those bees which were first taken out to California at once started business on their old principles, but that as soon as they became well assured of the surprising fact that there the flowers bloomed all the year round, they quickly fell from their useful habits. The author of *Westward by Rail* says nothing of the effect which this had on the morality of the bees now out there, and I, for my part, hardly like to speculate upon it.

I think that you will find the best time for work between the hours of nine in the morning and one o'clock. But those of you who have acquired the wealth and wisdom begetting habit of rising early and reading before breakfast may congratulate yourselves on possessing an immediate, as well as a remote, advantage over your fellows, for I am informed from reliable sources that work which is carried on at such "dewy" hours is pre-eminently productive, though I confess that I have never been in a position to verify the truth of the assertion from personal observation.

But if you could all be induced to work throughout your curriculum as if your examinations were close at hand, instead of waiting until you could count the time to them in weeks, or even in months, we could almost guarantee you a successful issue. The system pursued by certain men of waiting until their examination is staring them in the face and then beginning to "cram" for it—in fact, working their intellect against time—should be most carefully avoided; for the knowledge so

quickly acquired as quickly vanishes; and you must recollect that your true object in coming here is to acquire a knowledge of the healing art, not to scrape through your examinations with the least possible exertion.

We are told that the actor who, taking his time, not only commits to memory but studies his part so as to identify himself with the character he is about to sustain will hardly ever forget it, but that if he is called upon suddenly to "cram" a part on an emergency, although he may remember it sufficiently well for the purpose, yet soon finds that it has slipped from his memory.

Those of you who are fresh from school will probably come here with a memory in a high state of cultivation, whilst he who has for some time allowed that faculty to lie fallow will find it stand in need of considerably more culture. But, just as groups of muscles are capable of increasing in strength under physical exertion, so surely does the memory improve under continual exercise. How much of this intellectual process is natural, how much artificial, matters not; but the weak or overstocked memory will be apt to develop for itself in addition a further artificial system of memory, or *memoria technica*, such as was elaborated by the late Dr. Grey. The great mind looks with contempt upon such intellectual trickery, and calls it "demoralising;" but in these present times of examinations, when so many questions are set requiring a corresponding amount of knowledge comparatively useless to the surgeon, who will be above such a method of acquiring it? And just as in America a scarcity of manual

labour has led to the development of a great variety of mechanical substitutes, so must this examination mania develop a further amount of the so-called intellectual trickery.

The London University Examiners, for instance, will expect the candidate to know the composition of the *confectio sennæ*, and to be ready with two mental lists of aloes preparations, one under the head of Barbadoes; the other, Socotrine.

Now such information can well be acquired by a system of mnemonics. Unfortunately, after the examination is over, the student will experience considerable difficulty in ridding himself of it. But it is really saddening to see to what an absurd extent idle men push this system in regard to anatomy; for thus we find names and structures cropping up in an examination answer in a manner for which the only excuse that can be urged is, that they possess the same initial letter; but even a diligent student need not be above remembering, whilst working at ossification, that the number of letters in the word corresponds with the number of ossific centres in the case of vertebra, rib, sternum, scapula, humerus, and femur.

But whilst occupied with such studies as osteology, chemistry, mechanics, and what not, take care that the imagination, from a prolonged process of cramping, does not lose all power of flight. And to this end it will be well for you to find time for reading the works of such writers as Shakspeare and George Eliot, or of any other for whom you may have already acquired a fancy; but I take it upon myself to call

your attention to these two writers on account of their great acquaintance with the subjects of our studies and line of life, and that, being brought side by side with them, we may discover how little general information we possess, and that we may, moreover, learn more of that science which, under the name of "Human Nature," will frequently engage us later on.

At the present day the drama does not occupy that place as a popular educator which it ought, and that, in a great measure, on account of the antipathy with which it is regarded by many persons who have, perhaps, never witnessed a good play. But I would advise you to make a point of seeing as much of Shakspeare, Sheridan, and Goldsmith as may not be incompatible with your severer studies. Without a properly exercised imagination would the names of Columbus, Harvey, and Jenner have become immortal? Look to it that, taken up only with the paltry idea of obtaining a diploma, you do not become dried up in your own conceit!

Of all the studies with which you will be occupied during the next few years, anatomy is considered the most important, for it will be upon it that a great part of your technical knowledge will be based. Closely allied to it is physiology. The former science treats of the machinery of the creature, whilst the latter explains the way in which it works, the way force is generated at the expense of fuel—our daily food—and the need of proper supplies.

Can you imagine the mechanical engineer setting to work to repair a locomotive, without having acquired by previous education a thorough knowledge of the

manner in which it is constructed? Then how can you satisfactorily undertake the treatment of a diseased heart, without understanding the admirable arrangement of its valves and their natural office, or proceed to surgical interference with a part of the human frame of whose construction you know next to nothing? And I trust that, working at anatomy, you will find its interest to you equal to its importance. But as it is a long and difficult study, I shall spend the next few minutes in giving you some practical advice as to the manner in which you should work at it.

In the first place let me inform you that there are in anatomy, as in most other important businesses, a right and wrong way of procedure. Most students prefer the latter!

You will hardly expect me needlessly to burden your kind attention with a graphic account of this wrong way, so I will dismiss the subject with this warning, that, if you discover a method of learning anatomy which seems to you to be happily free of all trouble and difficulty—a sort of Royal road, in fact—you have, in all probability, found it out for yourself.

I will commence my practical advice with this aphorism:—There is only one way of learning anatomy, and that is by diligent dissection. Do not be deceived by certain students who will confidently assure you that such an occupation is an unnecessary and disagreeable way of wasting time, and that they picked up enough from lectures and demonstrations to get them through their “primary.” I cannot altogether contradict this their statement; but this I can say, that passing an examination in a subject and *knowing* that subject are

by no means synonymous phrases. Fortune, more capricious in examinations than elsewhere, may have smiled on them for once; but how often do they not meet a more retributive fate? Such men, caring nothing for their own reputation, and somewhat less for that of their teachers and of their Alma Mater, will, after scanty and irregular work for an examination, insist on going up to take what they call their "chance." So that if these men hereafter tell you that they never learnt their anatomy in the way I have advised, do not dispute it with them. But, when a student has worked his best, and, sufficiently well prepared, goes up for his examination at the advice of his teachers, and fails, then our thorough sympathy is demanded. It may be well that such cases do now and again occur lest we grow secure, and fall into the habit of regarding every rejected candidate as worthy of his lot. Did we only know it, failure is occasionally as grand as success.

That there are, from time to time, gross cases of failure of justice in a short and hurried examination I am well aware; but from considerable experience obtained in teaching, and as a frequent visitor to the college examinations, I can assure you that they are of by no means so frequent occurrence as we are persuaded to believe.

One knows that one examiner is apt to be "crotchety," expecting questions to be answered only in his own way, that another may be a little bit too rough or cynical in his manner to be agreeable to the sensitive candidate (and that especially if a knowledge of his own weakness has made the latter nervous). But all this is very much exaggerated.

Could you, as an examiner, refrain from shedding a silent tear, or from some more demonstrative way of relieving your mental distress, if you were told by a candidate at the end of his second year's study that he did not know of any special organ for the propulsion of the blood through the system—unless it were the lungs?

This extraordinary statement I heard made the other day at the college to an examiner (you will be sure to hear of him), who bore it with something more than Spartan fortitude.

The right way to go to work is this:—Sit down with a manual of dissections at your side, and labour on step by step at each succeeding layer of structures, handling everything and examining critically, with the aid of your book, muscles, vessels, nerves, and joints all in due order, and acquire the habit of arranging them in your memory, and associating them in that beautiful harmony in which they have been joined by Nature.

What would you think of a navigator who had separate charts for rocks, channels, and sandbanks?

Make frequent reference to the skeleton, and be provided with separate bones for convenience; and, thus learning them, you will find that they will lose much of their proverbial dryness. Pay most particular attention to the anatomy of the joints, taking careful observation of the various prominences and hollows: for you will find yourself in most urgent need of this knowledge as soon as you are in practice. Moreover, it is but this knowledge which gives you a superiority over the empirical "bonesetter," who will, however, notwithstanding this, occasionally cure by his rude

measures that patient whom you have confessed yourself unable to relieve. And as you work it will be much to your advantage to make yourself as independent as possible of the demonstrator of anatomy. What he tells you one day you will, likely, forget the next; whilst the knowledge that you acquire for yourself by your own labour you will appreciate and remember more thoroughly.

I do not go so far as to say that a demonstrator is of no use in the dissecting-room, for there must needs be some one to superintend and advise; but what I wish to imply is, that you should place but little reliance on anything but your own individual effort. And let not your studies be carried on in a cold, perfunctory manner, as if they had no lively and real interest for you, and as if they were best done quickly and put on one side.

If you have a mind capable of admiring that which is good and beautiful in the handiwork of men, be assured that you may find things far more beautiful in that of Nature. I pity that man who, looking at the spinal column, can see nothing in it but difficult subject-matter for a future examination, never admiring in the complexity, yet simplicity, of the arrangement of its many component parts, something more grandly perfect than was ever designed by the hand of the most cunning workman; and never appreciating the fact that, in this combination of diminishing bony segments, enormous strength is not incompatible with freedom of movement and grace of curve.

The utility of so intimate an acquaintance with the finest anatomical detail is often questioned by a certain

class of students, who would rudely separate that which is of a definite practical value in the study of anatomy—the outline drawing, I will call it—from those more delicate strokes which make up the shades and softness of the picture. But sure am I of this, that that student who will be at the pains to follow the finer vessels and nerves into the tissues over whose nutrition they preside, will carry away into his future professional life a much clearer idea of important geographical relations than he who is contented with the smallest amount of crude knowledge.

This careful study of anatomy will also teach the student that faculty of observation which is so necessary to the medical man, and of which many men are so painfully ignorant that they require, in all their wanderings in scientific paths, the presence of a guide who shall “personally conduct” them, and point out everything that is worth their notice, and from which aspect it should be viewed.

And is it nothing to your intellectual enjoyment to have acquired the power of seeing in the labours of a Michael Angelo or an Etty, or in a study by a Mulready—exquisitely feminine—beauties of form and line which cannot be appreciated by the uneducated eye?

It is a great advantage to every man that his education should be as comprehensive as possible, and you will find as you go on how much you owe to your training in classics and mathematics, and to other studies.

And this last subject should not have been left to be learnt here in your technical culture, for which the time is already too short. He who has passed such an

examination as the preliminary scientific of the London University previously to entering on his medical studies will possess the great advantage of having much more time to dispose upon other subjects. But perhaps it will be well for me to refrain from calling your attention to the large amount of work which will be expected of you during the next four years, lest, becoming disheartened, you should sit down by this the first milestone on your road to a noble art, and, "turning again," occupy yourself, like that fortunate prototype, in the less wearing and more remunerative walks of commerce.

But supposing that, after all, you determine to throw in your lot with us, you can hardly fail to find that the various and interesting subjects which you will have to study will induce in you a more liberal and enlightened view of things in general.

See the result of one single line of study upon man. Exclusive devotion to mathematics, logic, philosophy, or theology is but too apt to result in a narrowness of thought and intoleration which are as characteristic as they are objectionable.

And so surely does subordination of feeling creep on, that it becomes a question if the man is capable of a single aspiration beyond the shadow of the work wherein he is wrapped. What has become now of his finer feelings, of his emotions, of his passions? For they are unknown to him, or, at any rate, despised.

With love, charity, sympathy chased away, he has reduced his once noble nature to the level of a calculating machine or a complex syllogism.

But love, charity, sympathy must ever freely cir-

culate in you; and the more that, through their influence, you endeavour to practise the healing art, the less likelihood will there be of your so lowering yourself as to be taken up solely with the infectious and increasing desire of making money.

But, working from worthy motives, you will find many opportunities of enjoying the luxury of doing good, and in a higher way than in the mere giving of alms.

If you should, perchance, have no higher ideas in entering this profession to-day than that of growing rich, depend upon it that you will spend a disappointed and unhappy life.

In all probability, few among you will ever be rich; but, poor as you may be, you may always feel that it lies within your power to dispense such kindness and thoughtful advice as may be beyond price.

Even early in your professional career demands will be made upon your sympathy. You will find patients confessing to you with a simple truth such as could only spring from its being undemanded and unsought. You will not be likely to abuse so sacred a trust and confidence, but see to it that you never become cold and unsympathetic.

Most truly has it been said that "Physic should be honoured as a profession, but despised as a trade." Of course we are not to understand from this that we are to work for nothing, devoting our services, as we all do more or less, from the love or necessities of our art; but that if we have only a mercenary end in view we shall not fail to bring discredit upon ourselves and upon our profession.

That our present system of medical education is far from being perfect most people will admit, and it seems to me that the cause of this defect is twofold. And first, as regards the manner in which instruction is imparted.

In these days of high intellectual pressure, students are not permitted to work quietly, and so take in as much information as they are capable of retaining, but are submitted to a process of mental feeding such as is found to be attended with those rich results in the case of the Strasbourg geese. Thus, not only are they kept as clear as possible from all intellectual exercise, but, fixed in front of the lecturer's fire during a great part of the day, they undergo a course of intellectual fattening which must induce a plethora as gross as that so highly prized by the epicure in the other case.

At first, I dare say, many of you will like this enervating treatment : so do the geese.

But I am sure it is bad that you should always be being *taught*, never *learning*.

The only plea that I have ever heard urged in favour of this method of instruction is, that the public require it as a guarantee that the student is in the way of learning ; but I feel sure that the public are as ignorant as they are careless on the subject, and would be quite content that the final examinations should be the test of a man's knowledge. It matters little how that knowledge is acquired. If the student were required to follow but one or two courses of lectures in the session, his attendance at his hospital school could be perfectly well insured, whilst he would have much more time for practical study.

What would Abernethy, Brodie, and Cooper say if they could come once more amongst us, and, with a lecture time-table in hand, listen to a lengthy explanation of the mode adopted for acquiring the science and art of medicine in the present day? How that all our students, without regard to their varying dispositions and capacities, were compelled to spend the greatest part of their day in the lecture-theatre, and that they were much further aided in the study of anatomy by wax models and pictures more real than Nature herself? Abernethy I can almost hear giving vent to his condemnation in one of his characteristic sentences; whilst the others, more nice in their expressions, are equally strong in their disapproval.

True it is that certain men gain much from lectures: then by all means let them attend them. But the knowledge thus acquired is apt to be too theoretical, and though they may thus, and by reading, acquire a great talent for passing examinations, it by no means follows that they will make successful practitioners.

Let your knowledge be as practical as possible. Do not say, "I will acquire a theory now, and will work it out later on in practice."

Theories in a science like ours, which is even now partly speculative, may lead you astray; and though a subsequent process of wrong reasoning may eventually put you in the right again, your position with regard to your patient can hardly be considered satisfactory.

Practical knowledge will stand you in better stead when you shall find yourself alone at the bedside of a critical case. In such anxious times theorising would indeed be culpable.

Guard against placing too much faith in the administration of drugs, whose specific effects, even now, are not well understood.

The science of medicine is greatly indebted to homœopathy—that harmless domestic art—for having destroyed much of that blind belief in drugs which had descended through generations, and in allowing us to see how much afflicted Nature could do towards effecting her own cure, if left alone, or aided only by well-directed attention to hygienic influences.

Much of your future success will depend upon the faculty you possess of observing and interpreting symptoms, and of seeing how far bodily affections are the shadows cast by mental and functional disorders generally. In short, common sense is often of much more service than deep technical knowledge.

And thus we find the so-called man-of-the-world, with a vision unobscured by conflicting theories, and not looking too deeply for a cause, quickly restoring a lost balance.

As soon as you have passed an examination in anatomy and physiology, attend with constancy the out-patient department of the hospital, for there you will learn most of the nature, aspect, and treatment of those “every-day” affections which will take up so much of your time and attention when you are in practice.

The out-patient departments you will find to be—now that apprenticeships are abolished—the great link between you and the outside world of sufferers; and those persons who, in an excess of philanthropy, advocate their abolition on account of their tending to the abuse

of medical charity can hardly be aware of their vast importance in the scheme of medical education.

Finding the words "abuse of medical charity" and "medical education" in the same sentence, the subject of special hospitals is naturally forced upon our notice.

Whether this mushroom-growth of special hospitals is to be attributed to a prospect of support from the grand charitable funds of the metropolis or not, I cannot say, nor is it for me to speak to-day of the immense waste of money which is necessitated by the construction and subsequent maintenance of these institutions, which are too often the speculation of over-eager practitioners who conduct them under the auspices of a blinded philanthropist or member of Royalty.

But this I do say, that we as teachers, and you as learners, must necessarily feel the prejudicial effect on medical education, of their specious advertisements drawing from the wards of a general hospital cases which are much needed for clinical instruction.

Is it to be expected that you are to go to one hospital to see a sore throat under treatment, to another for a pathological demonstration upon a disease of the heart, and so on throughout the various organs?

Society demands, and the public health demands, the establishment of certain special hospitals—but was a line never to have been drawn?

The British public, more blind than Justice herself, has yet to learn that charity does not consist in the reckless giving of large sums of money, so much as in the ultimate result as regards the alleviation of sickness and distress.

But having wandered so far from a consideration of the waste of the student's time in the present system of education, I must press on to the second point upon which a radical improvement is much needed—the waste of the teacher's time and labour necessitated by the existence of eleven medical schools in London.

Each school having its own teachers in each subject, it must follow, I think, that not a few of them occupy their chair from no special liking for the subject which they teach ; and thus devoting no more time upon it from their private practice than is absolutely necessary, the cause of medical education and medical science suffers.

Professor Huxley has said with great force and truth that it is of no use “tinkering” at medical education with a view to its improvement while in its present state of existence.

The greatest strength and advantage would result from a fusion of these many medical schools into two grand educational establishments, the one north, the other south, of the Thames. In one of these the student should spend his first and second winters, and then, having passed an examination, should proceed to study the more advanced and practical part of the healing art in the various general hospitals, which would remain as centres of clinical instruction.

But having occupied so much time with advice as to how you should spend your working hours, I feel now bound to advise upon the allied subject of play. The two occupations should be kept carefully distinct, though now and then a student, with an amount of animal spirits in excess of discrimination, does unsuccessfully endeavour to carry them on simultaneously.

I recommend you to engage judiciously in all manly sports. Those clear-headed inhabitants of ancient Greece and Rome were more alive to the advantages gained in this way, both as regards mind and body, than we are. And I can give you as the result of over ten winters' experience, that the best football players are amongst the best workers in the dissecting-room, with, perhaps, just a sufficient number of exceptions as I require to prove my rule.

Let your Saturday afternoons be passed, not in the billiard-room, but in some outdoor exercise; and be assured of this, that if you have spent the rest of the week in honest work you have earned the after-part of Saturday for your amusement.

It is not for me to tell you how to spend your Sundays; but, at any rate, let them be kept free from the strain and worry of work. The time will come soon enough when you will have no choice in the matter.

If you have a taste for music and the fine arts you may now find excellent opportunities for its further culture. If such subjects were made to play a more important part in our earlier education, they might more often afford us the purest intellectual enjoyment and relaxation after mental and physical exertion. You will do well to support the musical society which you will find at S. Mary's Hospital, and in so doing think not that you are wasting time. You cannot be always at work, or you will become unsociable, unsympathetic. But whatever be your relaxations, see that they play but that secondary part to your studies which must be to the advantage of both; and, as regards music, hear what Shakspeare says:—

“Preposterous ass ! That never read so far
 To know the cause why music was ordain'd !
 Was it not to refresh the mind of man
 After his studies, or his usual pain ?
 Then give me leave to read philosophy,
 And, while I pause, serve in your harmony.”

And now, allowing our imagination to carry us through these four short years, let us see what fields of practice are open to you. The Army? I think not. For by Lord Cardwell's warrant this medical service has been shorn of all its position and *prestige*.

The surgeon can now serve with his regiment but five years; he is not allowed to attend his sick in hospital, and it is not even considered necessary that he should wear the uniform of the regiment with which he is connected. Formerly its headquarters were his home; now they are a precarious lodging. In fact, the Army surgeon can but consider himself a “waif;” and thus he is regarded by his half-brother officers.

The “sop” in the warrant was as liberal as it was economical. It gave all assistant-surgeons the title of surgeon, without the surgeon's pay!

Hardly liking to say more upon this subject, I turn with considerable satisfaction to Her Majesty's Naval Medical Service, where your prospects are much more hopeful, for it has fallen into such a state of “admiral disorder” that a great change must be imminent; and any change must be for the better.

The Indian Medical Service, however, I can strongly recommend. It is paternal and generous in its dealing, knowing well that to obtain the services of good medical officers it must treat them as gentlemen, and

offer reasonable inducement as regards pay and promotion.

But the greater number of you will eventually find yourselves embarked in private practice, and roughly tossed by its capricious waves. Be not disheartened at an early want of success. It may be that your talents fail to be appreciated merely on account of your want of grey hair. Time will remedy this defect; but, in the meanwhile, we cannot but feel that waiting is the hardest part of working.

But, having accepted the trying duty and meagre pay of a Poor-Law appointment, remember that your poorer patients are something more than subjects for clinical investigation, possessing sensibilities as acute, maybe, as our own.

Addressing, as I do to-day, you who are about to commence a course of scientific training, I should feel conscious of having fallen far short of my duty, did I not speak out clearly upon a subject which must occupy a prominent place in your thoughts. The relationship existing between science and religion you may be often led to discuss, though it will not be in good taste to be obtruding your views of it upon others. However, when occasion demands, be ready to speak them out, never forgetting to extend to those who may differ from you, that liberality and belief in honesty of intention which you yourself demand.

With the learned author of the *Physiology of the Mind*, I believe that no real antagonism exists between science and religion. Men of science, no longer hampered by religious tyranny, as they were in the dark days of Galileo, can work on freely in the cause of truth. But

the most zealous recipient of the theory of Democritus, contained in those six propositions, must still admit, unless, indeed, his mind is warped by intense conceit, that Matter may yet remain possessing atoms of such infinite fineness as to be beyond the reach of material investigation. Science has, indeed, accomplished much ; but much must remain beyond the power of philosophic explanation.

An illiberality occasionally to be found even now amongst certain students of theology, has done much towards fostering this so-called antagonism, and one cannot help feeling that if they would more often leave their books and search for awhile into the workings of Nature, they would be less ready to employ the word "heterodoxy" as best expressing the views of those who differ from them.

But, in the course of your studies, as you watch Nature constructing and repairing, admiring her boundless liberality in all the vital processes, and her equal provision against waste ; and as you follow her handiwork through the ascending classes of the animal kingdom, from the microscopic jelly-like particle to its highest development in man, do not allow a mere handful of knowledge to blind you to the existence of a Divinity that is shaping all her ends. Rather, having placed such an honest belief high in your creed, follow the advice given long since by a learned physician—

" Search while thou wilt, and let thy reason go
To ransom truth ; e'en to th' abyss below.
Rally the scatter'd causes, and that line
Which Nature twists be able to untwine.
It is thy Maker's will."

In such a spirit as this worked those princes amongst

philosophers, Newton, Boyle, and Faraday—men whose mighty intellects flooded the world of science with the light of truth.

And now, gentlemen, before we separate to-day, allow me specially to direct your attention to the well-known aphorism of Hippocrates, which you see inscribed in appropriate characters of gold upon the entablature above your lecturer—

Ὁ βίος βραχύς, ἡ δὲ τέχνη μακρὴ.

Now, our first and far-seeing Dean, fearing that this inscription might not be noticed by the general run of students, or, at any rate, might not be capable of that ready mental digestion which was desirable, placed a parallel thought, taken from the American poet, in a position where it might catch the wandering eye many times during the tedious lecture hour: thus, gentlemen, you see immediately around the clock-face—

“Art is long, time is fleeting;”

and I think that I cannot bring to a close these my words of friendly advice and warning, in a more appropriate manner than by giving you a few more lines from that same source—lines which contain thoughts which should be ever ticking in our ears as we labour on in this our grand profession—

“Art is long, and time is fleeting,
And our hearts, though stout and brave,
Still like muffled drums are beating
Funeral marches to the grave.”

* • • •

“Lives of great men all remind us
We may make our lives sublime,
And, departing, leave behind us
Footprints on the sands of time.”

