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# LECTURES ON SURGERY,

DELIVERED AT

ST. GEORGE'S HOSPITAL,

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## LECTURE I.

INTRODUCTORY DISCOURSE.

GENTLEMEN.—A large proportion of those whom I now address are assembled for the first time, for the purpose of pursuing their studies in the Medical School of this Hospital; and their feelings on this occasion are not unknown to me; for, to a great extent at least, they must be such as I myself experienced, when long ago I was situated as they are at the present moment. Transplanted, perhaps, from some small community into this great city; the largest, the most populous, the richest that ever flourished; jostled in crowded streets; surrounded by palaces; where the high-born and the wealthy; where the most eminent statesmen; the most distinguished in literature, in sciences, and arts, and in every other human pursuit, are, as it were, fused into one mass to make the London world: contemplating the novel scene around you, but being not yet identified with it; it cannot be otherwise than that a sense of loneliness should come upon you in the intervals of excitement; that you should say, "What am I in the midst of so much bustle, activity, and splendour? who will be at the pains to watch the course of a medical student? who will know whether I am diligent or idle, or bear testimony in after-years to the correctness or irregularity of my conduct during this brief period of my life?"

But let not your inexperience lead you into so great an error. Even now, when you believe that no one heeds you, many eyes are upon you. Whether you are diligent in your studies; striving to the utmost to obtain a knowledge of your profession; honourable in your dealings with others; conducting yourselves as gentlemen; or whether you are idle and inattentive; offensive in your manners; coarse and careless in your general demeanour; wasting the precious hours, which should be devoted to study, in frivolous

and discreditable pursuits; all these things are noted to your ultimate advantage or disadvantage; and in future days, you will find that it is not on accidental circumstances, but on the character which you have made as students, that your success as practitioners, and as men engaged in the business of the world, will mainly depend. By the time that you are sufficiently advanced for your lot in life to be finally determined, the course of events will have wrought mighty changes among us. Of those who are now the most conspicuous in station, and the most influential in society, many will have altogether vanished from the scene of their former labours; and others will be to be found only in the retirement of old age. Younger and more active spirits, your own cotemporaries, and those a little older than yourselves, will have occupied their places: and the tribunal, by which you will be judged of hereafter, will be composed of a different order of individuals from those to whose favourable opinion you would at this moment be most anxious to appeal.

But I should be sorry if I were misunderstood as representing this to be the only or the principal motive which should lead you to avail yourselves to the utmost of your present opportunities. The knowledge which you will obtain as students, is to be the foundation of the whole of that, which many years of professional practice will afford you afterwards; and, if the foundation be insecure, the superstructure will be of little value. However imperfect may be the sciences belonging to the healing art, to bring them even to their present state has been the work of centuries. The industrious student may enter on the active pursuit of his profession with a scanty store of knowledge compared with that of which he will find himself possessed twenty years afterwards: but he is in the direct road to greater knowledge. He has the advantages of principles which have been established by the labours of many preceding generations; and this will render the subsequent efforts of his life comparatively easy. But he who has neglected his education must, as it were, begin anew; and he will find, when it is too late, that no combination of energy and talent will enable him to rise to the level of those who were, in the beginning, his more diligent competitors. He will, moreover, labour under another and still greater disadvantage. One business of education is to impart knowledge; but another, and still more important one, is to train the intellectual faculties. To acquire the habit of fixing your attention on the object before you; of observing for yourselves; of thinking and reasoning accurately; of distinguishing at once that which is important from that which is trivial; all this must be accomplished in the early part of life, or it will not be accomplished at all: and the same remark is not less applicable to qualities of another order. Integrity and generosity of character; the disposition to sympathize with others; the power of commanding your own temper; of resisting your selfish instincts; and that self-respect, so important in every profession, but especially so in our own profession, which would prevent you from doing in secret what you would not do before all the world; these things are rarely

acquired, except by those who have been careful to scrutinize and regulate their own conduct in the very outset of their career.

It cannot be too often brought before you, nor too earnestly impressed upon your minds, that being, in the present stage of your journey through life, in a great degree released from responsibility to others, your responsibility to yourselves is much increased. Your future fortunes are placed in your own hands; you may make them, or mar them, as you please. Those among you, who now labour hard in the acquirement of knowledge, will find that they have laid in a store which will be serviceable to them ever afterwards. They will have the satisfaction of knowing that, in practising their art for their own advantage, they are, at the same time, making themselves useful to their fellow-creatures: when they obtain credit, they will feel that it is not undeserved; and a just self-confidence will support them even in their failures. But for those who take an opposite course, there is prepared a long series of mortifications and disappointments. Younger men will be placed over their heads. Even where their judgment is correct, they will themselves suspect it to be wrong. With them, life will be a succession of tricks and expedients; and if, by any accident, they should find themselves elevated into situations for which they have not been qualified by previous study, they will find that this is to them no good fortune; the world will always compare them with better persons, and the constant anxiety to satisfy others, and to keep themselves from falling, will destroy the comfort of their existence. Whether it be in our profession or any other, I know of no individuals much more to be pitied than those whom fortuitous circumstances have lifted into places, the duties of which they are not well qualified to perform.

I trust that none among you will suspect that these observations are founded on any theoretical view of the subject, or that it is merely as a matter of course that I thus address myself to younger men. I wish to see those who are educated in this hospital, an institution to which I am indebted for so many advantages which I have possessed in life, go forth into the world useful and respectable members of an honourable and independent profession. I wish to see them obtain success, and worthy of the success which they obtain: and having now had a long experience in the history of medical students, and having been careful to watch their progress through life, I am satisfied that the only method by which this can be accomplished, is that which I have pointed out: and, I may add, that I have never known an individual, who thus applied himself seriously and in earnest to his task, whose exertions were not rewarded by a reasonable quantity of professional success—such as would be sufficient to satisfy any but an inordinate ambition. Beyond this, your lot in life may indeed be influenced by circumstances not altogether under your control. Accident may place one individual in a situation more favourable, and another in a situation less favourable to his advancement. One may have the advantage of greater physical powers, enabling him to undergo the same exertion with less fatigue, and to preserve his energies unimpaired, where those of another would be

exhausted; and, in like manner, one may have the advantage of powers of intellect which are denied to his competitors.

With respect, however, to the last-mentioned subject, I have no doubt that the difference is not so great as you, or the world generally, may suppose it to be. There are few persons who have not some talent, which, if properly cultivated, may be turned to good account, and he who is deficient in one kind of talent may excel in another. But the greatest talents may be wasted. They may be blighted by indolence; they may be used for base or improper purposes; or, they may be directed to too great a variety of objects. It is well, indeed, for you to have some diversity of study, so as to keep all your mental faculties in wholesome exercise; so that you may not be without some sympathies with those around you, and that you may avoid the evils of narrowmindedness and prejudice; still, whoever would be really useful in the world, and be distinguished in it, must act to a great extent on the principle of concentration, keeping one object especially in view, and making his other pursuits subservient to it. And let no one sit down in despair and say, "I have not the abilities of my neighbours, and it is needless for me to exert myself in competition with them." If you would know what your own powers are, you must try to use them. Industry is necessary to their development; and the faculties of the mind, like those of the body, go on improving by cultivation. It is impossible for you to form a right estimate of yourselves in early life, nor can you be rightly estimated by others. The self-sufficient, who do not keep before their eyes an ideal standard of perfection, who compare themselves only with those who are below them, will have an advantage with inexperienced and superficial observers; but I must say that I have never known any one to do any real good in the world, or obtain ultimately a bright reputation for himself, who did not begin life with a certain portion of humility. The greatest men are humble. Humility leads to the highest distinction, for it leads to self-improvement. It is the only foundation of a just self-confidence. Study your own characters; endeavour to learn, and to supply your own deficiencies; never assume to yourselves qualities which you do not possess; combine all this with energy and activity, and you cannot predicate of yourselves, nor can others predicate of you, at what point you may arrive at last. "Men," says M. Guizot, "are formed morally as they are formed physically. They change every day. Their existence is always undergoing some modification. The Cromwell of 1650 was not the Cromwell of 1640. It is true that there is always a large stock of individuality: the same man still holds on; but how many ideas, how many sentiments, how many inclinations have changed in him! What a number of things he has lost and acquired! Thus at whatever moment of his life we may look at a man, he is never such as we see him when his course is finished." These eloquent and philosophical remarks, made by the present Prime Minister of France, are not more applicable to those who are engaged in politics, than they are to those who are engaged in the pursuits of private life, and to none more than to yourselves.

It is not my intention on this occasion to give you any advice as to the detail of your studies. It is best that this should be left to your respective teachers. They will tell what lectures you should attend first, what afterwards; what hours you should devote to anatomy, what to the hospital practice; where you should take notes and where you need not do so. There are, however, some general suggestions, which I may venture to offer, without exceeding those bounds to which I wish that my observations should be restricted, and without taking on myself those duties which more properly belong to others.

The first effect usually produced on the mind of a medical student, is that of being bewildered by the number and variety of subjects to which his attention is directed. In one class-room he is instructed in chemistry; in another in the materia medica. In one place, the structure of the human body is unravelled before him; and in another, he contemplates the interminable varieties of disease, and the methods which are adopted for their cure. He sees none of the relations by which these different investigations are combined together, so as to form one science. He has the opportunity of learning a great number of facts, but for the most part they are insulated, and independent of each other; he can reduce them to no order, and the want of a proper arrangement and classification makes the recollection of them difficult and uncertain. But this is not peculiar to medical students. The same difficulty occurs to every one, who enters for the first time on an extensive field of research: and they must, indeed, be very indolent, and very unfit for the business of life, who suffer themselves to be disheartened by it. Have patience for a while; keep your attention fixed on the matters which are brought before you, and after every lesson that you have received, or at the close of every day, endeavour to recollect what you have seen and heard; and in the course of a short time there will be an end of the confusion; the mist which there was before you will have passed away; where every thing had been obscure, there will be a clear landscape; and the studies, which, when you were first initiated in them, were dry and irksome, will become interesting and agreeable. As you acquire a more extensive knowledge of individual facts, it must necessarily happen that the relations which they bear to each other will become more distinctly developed. This, however, does not seem to be the whole explanation. I cannot well understand what I have observed to happen in myself, without supposing that there is in the human mind a principle of order which operates without the mind itself being at the time conscious of it. You have been occupied with a particular investigation; you have accumulated a large store of facts; but that is all: after an interval of time, and without any further labour, or any addition to your stock of knowledge, you find all the facts which you have learned in their proper places, although you are not sensible of having made any effort for the purpose.

In the commencement of your studies, you will, at first, be altogether occupied in the acquirement of knowledge communicated to you by others. You will learn from lectures and from books what

others have learned before you, and what is there taught you must take for granted to be true. A student may be very diligent and industrious, and yet go no farther than this through the whole period of his education. He may become an accomplished person; full of information; a walking cyclopædia; and, at the end of his labours, may obtain the reputation of having passed through his examinations with the greatest credit. All this is as it should be, and those who think that to pass a creditable examination is the only object of their studies, will be quite satisfied with the result. But is it sufficient in reality? Are no qualifications required besides those, which are wanted for your examination? It is far otherwise, and no one will rise to be conspicuous in his profession, nor even to be very useful in it, whose ambition is thus limited. The descriptions of disease, and the rules of treatment, are simplified in lectures and in books; and if not so simplified, they could not be taught at all. But you will find hereafter, that disease is infinitely varied; that no two cases exactly, and in all respects, resemble each other, and that there are no exact precedents for the application of remedies. Every case that comes before you must be the subject of special thought and consideration; and from the very beginning of your practice, although what is taught in lectures and books may render you great assistance, you will be thrown in no small degree, on your own resources. There is no profession in which it is more essential that those engaged in it should cultivate the talent of observing, thinking and reasoning for themselves, than it is in ours. The best part of every man's knowledge is that which he has acquired for himself, and which he can only to a limited extent communicate to others. You will spend your lives in endeavouring to add to your stores of information; you will, from day to day, obtain a clearer and deeper insight into the phenomena of disease; you will die at last, and three-fourths of your knowledge will die with you; and then others will run the same course. Our sciences are, indeed, progressive; but how much more rapid would their progress be, if all the knowledge that experience gives, could be preserved. Now, these remarks are of practical importance to you all. You should begin to act upon them at an early period of your studies. Make out every thing relating to the structure of the body for yourselves. Do not altogether trust to what is told you in lectures and books, but make the knowledge your own by your own labours. Observe for yourselves the phenomena of disease, and the only way of doing this in an efficient manner is to take your own written notes of cases. I say, *your own* notes, for copying those taken by others, as far as the improvement of your own mind goes, is nearly useless; and when you have taken notes in the morning, write them out in the evening, and think of them, and compare them with one another, and converse on them with your fellow-students, and all this will render the investigation of disease a comparatively easy matter afterwards.

In these latter observations, I have anticipated some of those which I had intended to address especially to those among you who are on the point of offering themselves to the public as candidates

for practice. It would be a fatal error for you to suppose that you have obtained the whole, or even any large portion of the knowledge which it is necessary for you to possess. You have not done much more than learn the way of learning. The most important part of your education remains;—that which you are to give yourselves, and to this there are no limits. Whatever number of years may have passed over your heads, however extended may be your experience, you will find that every day brings with it its own knowledge; you will still have something new to seek, some deficiencies to supply, some errors to be corrected. Whoever is sufficiently vain, or sufficiently idle, to rest contented, at any period of his life, with his present acquirements, will soon be left behind by his more diligent competitors. By the young practitioner, every case that he meets with, should be carefully studied; he should look at it on every side; and he should, on all occasions, assist his own inquiries by a reference to his notes of lectures and to books.

But it will rarely happen, that in the beginning of a professional life, even the most diligent and the most successful person will be able to occupy the whole of his time with strictly professional pursuits; and the question must arise, "What is he to do with his leisure hours?" A most important question, indeed, it is; for the character and the lot of the individual must depend, in a very great degree, on the way in which such leisure hours are employed. If altogether devoted to what, dull as they generally are, the world calls amusements, these do but spoil the mind for better things; and if you trust to such desultory occupations as accident may bring, the result will be no better. You will be the victims of melancholy and *ennui*; and unreasonable despondency with respect to your future prospects will oppress your faculties, and deprive you of that spirit, and of those energies, which are absolutely necessary to your success. And these evils are easily avoided. How many branches of knowledge are there, which, if not directly, are indirectly useful in the study of pathology, medicine, and surgery! and all general knowledge, whether of literature, or of moral or physical science, tends to expand the intellect, and to qualify it better for particular pursuits. There is no excuse for a young professional man who does not devote some portion of his time to the general cultivation of his mind. His own profession have a right to expect it of him, and he owes it to his own character. Ours is no political profession. It is one belonging altogether to private life. Your place in society depends, not on your being mixed up with parties and factions; not on circumstances external to yourselves, but on your own qualities; you make it for yourselves. You wish, I conclude, to be received in society as being on a footing with well-educated gentlemen. But, for this purpose, you must be fitted to associate with them; and this cannot be the case, if you know nothing of those matters which are the general subject of conversation among them. The world care little about those distinctions, which, for the sake of a more convenient division of labour, we make among ourselves; and a well-conducted and well-informed man will be just as well received

in society if he belongs to one grade of the profession as if he belongs to another. It is very much to the discredit of the great medical institutions in this country, that, except in some few instances, they have not given even an indirect encouragement to the obtaining a good general education, and, in one instance, the legislature have actually done their best to throw an impediment in the way. I know that many, nevertheless, have not been without this advantage; but they may improve themselves still further, and others may, in a great degree, make up for what they have lost, by a right disposal of their time in the early part of their practice.

It cannot be difficult for any one endowed with an ordinary degree of intelligence and curiosity, to fill up his vacant hours with pursuits that are no less interesting than useful. But your profession itself, from the moment you are established as practitioners, will possess a new interest very different from that which belonged to it during the period of your pupilage. Hitherto you have been acting under the direction of others, and on their responsibility. Hereafter, you will have to act for yourselves, and on your own responsibility. Whatever credit is to be obtained, it will be your own; and, on the other hand, where blame is due, you may be sure that no one will volunteer to divide it with you. In every case that comes under your care, you will have to account to your own conscience for having done the very best that it was in your power to do for your patients' welfare: you will have to account also to others; to your own immediate circle of friends and patients; to society at large; to all those whose favourable opinion of your character and conduct is necessary to your success in life. You will find yourselves surrounded by duties, responsibilities and anxieties, which were unknown to you as students. He who has not a full sense of the responsibilities which it involves, is unfit for our profession; and the anxieties of a professional life are but a wholesome stimulus to diligence and exertion. I say this, supposing them to be kept within reasonable bounds. You may allow your thoughts to dwell on subjects of anxiety until an entirely opposite effect is produced, and life is rendered miserable, and the mind enervated. Such a morbid sensibility is as mischievous on the one hand as a want of just sensibility is on the other. You must be careful to train the mind so that it may not fall into either of these extremes. Make every exertion to obtain knowledge, and to use it properly; and then keep it in your recollection that there are bounds to human knowledge, and to human powers; and that, in the exercise of our art, we cannot do all that is required of us; for, if we could, pain and misery would be banished from the world, man would be immortal, and the order of the universe would be disturbed. Do not begin life with expecting too much of it. No one can avoid his share of its anxieties and difficulties. You will see persons who seem to enjoy such advantages of birth and fortune, that they can have no difficulties to contend with, and some one of you may be tempted to exclaim, "How much is their lot to be preferred to mine!" A moderate experience of the world will teach you not to be deceived

by these false appearances. They have not your difficulties, but they have their own; and those in whose path no real difficulties are placed, will make difficulties for themselves; or, if they fail to do so, the dulness and monotony of their lives will be more intolerable than any of those difficulties which they may make, or which you find ready made for you. Real difficulties are much to be preferred to those which are artificial or imaginary: for, of the former, the greater part may be overcome by talent and enterprise, while it is quite otherwise with the latter. Then, there is no greater happiness in life than that of surmounting difficulties; and nothing will conduce more than this to improve your intellectual faculties, or to make you satisfied with the situation which you have attained in life, whatever it may be.

To be prepared for difficulties; to meet them in a proper spirit; to make the necessary exertion when they occur; all this is absolutely necessary to your success, whatever your profession or your pursuit in life may be. No one can be useful to others, or obtain real credit for himself, who acts on any other rule of conduct. But it is more easy to lay down the rule than to follow it, unless the mind be disciplined for the purpose from the beginning. The natural tendency of mankind is to indolence; to shrink from difficulties; to try to evade them rather than to overcome them. Never yield to this disposition on small occasions; and thus you will acquire a habit which will enable you to do what is wanted on great occasions, without any violent or painful effort. It is by neglecting their conduct in the smaller concerns of life that so large a portion of mankind become unequal to the performance of their higher and more important duties. If you would know a man's character, look at what he does in trifles, and, for the most part, you will be able to form no inaccurate notion of what he would be in greater things.

I have heard the following anecdote of a distinguished individual who afterwards rose to the highest honours of the legal profession. For several years, in the early part of his life, he had been wholly without professional employment. One term went, and another came; but that which brought briefs to others brought none to him. Still he was always at his post, and, disappointed but not discouraged, he continued to labour, laying up stores of knowledge for his future use. At last, it happened that he was employed as a junior counsel in a cause of great importance. The evening before the cause was to come on in the court in which he professed to practice, the senior counsel, or (as he is technically called) his leader, was seized with a sudden illness. No one of the same standing could be found to supply his place; and late in the evening the solicitor went, probably unwillingly enough, to the junior counsel, and represented to him under what circumstances he was placed, and that he must trust to him alone. All the hours of the night were devoted to the task. The knowledge which the poor obscure student had acquired now turned to good account. On the following day he gained such credit that his reputation was established; and from this time his elevation was rapid. Now this may perhaps be regarded as an extreme

case, but something like it must happen to every one who attains a high station afterwards. There are few so indolent that they will not make an exertion for the sake of an immediate reward; but it is a poor spirit that can accomplish no more than this. The knowledge which you acquire to-day may not be wanted for the next twenty years. You may devote whole days and nights to study, and at the end of the year may not be aware that you have derived the smallest advantage from it. But you must persevere nevertheless; and you may do so in the full confidence that the reward will come at last. There is nothing in which the difference between man and man is more conspicuous than it is in this; that one is content to labour for the sake of what he may obtain at a more advanced period of his life, while another thinks that this is too long to wait, and looks only to the immediate result. At first, the former may seem not only to make no greater progress than the latter, but even to be the more stationary of the two. But wait, and you will find a mighty difference at last. You cannot judge from the first success of a professional person what his ultimate success will be: and this observation applies especially to those who contend for the greater prizes, not only in our profession, but in the majority of human pursuits.

A thorough determination to attain an object is the first step towards its attainment.

If you wish to advance yourselves in the way of life which you have chosen, you must persevere in one undeviating course, wandering neither to the right nor to the left, or making such excursions as you make into other regions of knowledge subservient to your main pursuit. What is called a life of pleasure is incompatible with a life of business; and those who have a more noble ambition, who love knowledge for its own sake, must learn to limit their ambition, and not waste their talents or their reputation by grasping at too much. Those who would excel in all things will excel in nothing. They may excite the wonder of the educated and uneducated vulgar: but those who are the best qualified to judge will detect their weakness, and smile at their superficial acquirements; and, after all their labour, they may die at last, and leave the world no better than it would have been if they had never existed.

And here I can conceive that some among you may say, "Is there any thing which the medical profession can bestow, which will prove a compensation for the labour, the exertion, and the sacrifices which it entails upon us? Is it better to continue in it, or to turn aside to some other pursuit or employment? Indeed, it is well that this question should be thoroughly considered before it is too late; for, as far as I have seen the world, nothing is more ruinous than that unsettled state of mind which would lead you, when you are fairly embarked in one profession, to grow dissatisfied with it, and desert it for another. There are, I know, some remarkable instances in which the result was different; but it would be dangerous to quote these as precedents which you might safely follow, or to make the

example of a peculiar genius, like that of Erskine, the foundation of a rule for ordinary men.

I know of no profession that is worthy of being pursued which does not require as much exertion, as much labour, as many sacrifices, as that in which you are engaged; and I also know of none in which he who has the necessary qualifications is more sure of being rewarded for his labours. If it be your ambition to obtain political rank, or to have that sort of reputation which a political life affords, you will be disappointed; for, as I have already observed, our profession has nothing to do with politics. It belongs to private life; and the only other association which it has is that of science. There are few departments of either physical or moral science with which it is not, in a greater or less degree, connected; and there are some with which the connection is so intimate, that the study of them may be almost regarded identical. The study of anatomy and physiology is a necessary preliminary to that of pathology; and the former cannot be understood by any one who has not some knowledge of the laws of mechanics and optics. Animal chemistry is daily becoming more essential to physiology, and is even beginning to illuminate some of the more obscure parts of the science of disease. You are to look, not to political rank, but to the rank of science. No other rank belonged to Newton or Cavendish, to Hunter or Davy; yet their names will live in distant ages; and they will be regarded as benefactors of the human race, when the greater number of their more noisy cotemporaries, if remembered at all, are remembered without respect.

We are informed by his son-in-law and biographer, that, when Mr. Pott was seized with his last illness, he said, "My lamp is nearly extinguished: I hope that it has burned for the benefit of others." He addressed himself to his own family, and died on the following day; and, under such circumstances, it would be absurd to suppose that this was said merely with a view to produce an effect, or that these were any but his real and heartfelt sentiments. Undoubtedly it must be a great satisfaction at the close of life, to be able to look back on the years which are passed, and to feel that you have lived, not for yourselves alone, but that you have been useful to others. You may be assured, also, that the same feeling is a source of comfort and happiness at any period of life. There is nothing in this world so good as usefulness. It binds your fellow-creatures to you, and you to them; it tends to the improvement of your character; and it gives you a real importance in society much beyond what any artificial station can bestow. It is a great advantage to you, that the profession in which you are about to enter, if promptly pursued, is pre-eminently useful. It has no other object; and you cannot do good to yourselves without having done good to others first. Thus it engenders good feelings and habits; and I know of no order in society who, taken as a whole, are more disinterested, or more ready to perform acts of kindness to others, than the members of the medical profession.

Usefulness is the best foundation of independence. There are