AN ADDRESS

ON

MEDICAL WORK AND MEDICAL DUTY.

Delivered, after the Distribution of Prizes, at the opening of the Winter Session of King's College Medical School.

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THAT my colleagues should, for the second time within a period of six years, have assigned to me the task of opening the medical session by distributing the prizes and delivering an address, is, I feel, to confer a great honour, and also to impose a grave responsibility—a responsibility which I should not have sought, but which I felt that I should not have been justified in declining.

Before proceeding to the main subject of my address, I have to express, in a few words, the sorrow which we all feel on account of the recent sudden death of Mr. Royes Bell.

During the many years of his connection with the hospital, Mr. Bell was remarkable for thorough devotion to the double work of tending his patients and teaching his pupils, with the result of obtaining the esteem and affection of all who came in contact with him. Thoroughly unselfish as he was, and full of consideration for others, he was surrounded by a numerous circle of deeply attached friends. In the wards of the hospital, I have often been indebted to him for surgical aid, skilfully and kindly rendered to my patients. His loss will long be deeply felt by us all.

The vacancy thus occasioned in the surgical staff of the hospital has been filled by the appointment of Mr. Barrow, a former King's College student, and a well-known skilful surgeon and successful teacher, to the office of Assistant-Surgeon; while, to relieve Dr. Burney Yeo of the labour of out-patient work, which he has faithfully discharged for a number of years, Dr. Dalton, who has already done good service in the department of pathology, has been appointed Assistant-Physician of the hospital.

It is probable that most men who have lived beyond middle-age, have sometimes indulged the wish that they could begin life again, with the aid and guidance of such experience as they have acquired during their past career. The wish is obviously vain, and impossible of fulfilment; but it may be permitted, and, on such an occasion as this, it may perhaps be expected, that one who has reached the autumn of life should endeavour to draw from his stores of knowledge and experience some materials which may be of service to those who are yet in the spring-time of existence. And that is the object which I shall endeavour to keep steadily in view, while I address myself to those who are just commencing, or who have already made some progress in, the study of subjects connected with the science and practice of medicine and surgery.

Let me beg of you not to suppose that I assume to be a living exemplification of the precepts which I am about to submit to you. Rather I desire to perform the humble but useful part of a whetstone, in accordance with the familiar passage: "*Fungar vice cotis, acutum reddere quæ ferrum valet, exors ipsa secandi*;" which I will venture to paraphrase by saying that, while making no claim to special acuteness myself, I desire, if it may be, to contribute to the sharpening of your intellectual and moral faculties.

My object is to offer you some advice, which may be of use to you during your student-career, and also to make some suggestions for your guidance when, hereafter, you assume the duties and responsibilities of medical and surgical practice.

You will scarcely need to be told that very weighty, though, at present, unforeseen and incalculable results, to yourselves and to others, depend upon the manner in which you spend the four or five years during which you have to qualify yourselves for the practice of your profession. If, unhappily, any of you should neglect the opportunities which will now be afforded you for laying a solid basis upon which to erect the superstructure of professional knowledge and skill, it is scarcely possible that, by any future effort, you will be able to retrieve the lost time.

In pursuing your studies, you will do well to follow exactly the course prescribed for you by authority. You will find hereafter, if you do not already see, that there is good reason for the order in which the various subjects are brought before you.

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The three great subjects to which your attention will first be directed are anatomy, physiology, and chemistry; and, unless you have mistaken your vocation, you will find in these studies an abundant source of interest. It scarcely need be insisted upon, that a knowledge of the structure and functions of the human body is an essential foundation for the practice of medicine and surgery.

It may not appear so obvious, but it is not less true, that some knowledge of chemistry is absolutely necessary for every practitioner. Apart altogether from its practical utility, a diligent study of the facts and laws of chemistry will prove an invaluable means of mental training and discipline. Observation, memory, and the reasoning faculty are each and all exercised and strengthened by a thorough study of that delightful science. The subject is so extensive that a lifetime scarcely suffices for the thorough mastery of all its details and principles. But, without aspiring to be profound chemists, it will be your duty to acquire such a theoretical and practical knowledge of the subject as will be required in the daily practice of your calling. A man ignorant of chemistry cannot write a prescription without the risk of combining ingredients which are incompatible, and so bringing about most unexpected and undesirable results. A knowledge of chemistry is essential for understanding the operation, and therefore for the successful administration, of antidotes for poisons. It is equally essential for the testing of the various secretions, by which the most valuable information as to the presence and progress of disease is obtained.

The time will come when circumstances or your own deliberate choice will decide for each of you what department of practice you shall adopt; whether you will become consulting physicians or surgeons or so-called general practitioners, or whether you will select some such special department of practice as obstetrics, lunacy, or ophthalmic, aural, or dental surgery. Now, I desire to impress upon you that the only sure and safe foundation for specialism is a thorough knowledge of disease in general. It should be said with truth of the specialist, not that he knows less of general disease, but that he has more knowledge of the nature and treatment of some special class of diseases. Let me now give you some proofs and illustrations of this statement.

There are few, if any, special departments of practice which have so indisputable a *raison d'être* as ophthalmic surgery, for the successful practice of which a special manual dexterity, and constant practice in the performance of delicate operations, are essential. But again, there are few diseases which afford so many, and such striking, illustrations of the close relationship between various tissues and organs, and the dependance of apparently local structural changes upon remote and often general constitutional conditions as those which affect the eye. Thus, in one case, defect of vision may, by the aid of the ophthalmoscope, be seen to be caused by a degeneration of the retina, the result of Bright's disease of the kidney; in another case, blindness may be seen to result from obstruction of a retinal artery by a portion of blood-clot which has been detached from a diseased valve of the heart; while, in yet another, loss of vision may be traced to degenerative changes in the optic nerve, consequent on the growth of a tumour in the brain. Now, from these facts, it is manifest that an ophthalmic surgeon, who had no knowledge of diseases of the kidney and the heart and the brain, would often fail to correctly interpret the ocular defects with which he has to deal; while, on the other hand, a physician who undertakes the study and treatment of renal or cardiac or cerebral disease, without having acquired the power of inspecting the interior of the eye by the aid of the ophthalmoscope, is at a manifest disadvantage.

The same principle, namely, the dependance of apparently local disease upon remote pathological changes, may be illustrated by affections of the larynx. The use of that simple instrument, the laryngoscope, enables us to demonstrate that while, in one case, loss or impairment of voice is caused by structural change within the larynx, in another case, the vocal defect is a result of an aneurysm or other tumour in the neck or within the chest, pressing upon one or other of the nerves which supply the organ of voice; while, in yet another class of cases, the laryngeal trouble is traceable to disease within the brain or spinal cord. Obviously then, a mere laryngoscopist, that is, one whose vision is limited to the larynx, would be very incompetent to deal successfully with the diseases of that organ.

My object in referring to the facts which I have here briefly set forth, has been two-fold. First, I wish to impress upon you that, between the various organs and functions of the body, there exists, both in health and in disease, a correlation, and, to use a modern phrase, a solidarity, the recognition of which is of the highest practical importance. There is a strictly scientific truth in the familiar apostolic doctrine, "*whether one member suffer, all the members suffer with it.*"

The universe is governed by all-pervading immutable laws. As the astronomers, relying upon the constancy of the laws of gravitation and of planetary motion, have discovered a previously unknown planet by observing the perturbed orbit of one before known; as the biologists, in reliance upon the constancy of organic types, have been enabled, from a fragment of a skeleton, or from a tooth, to reconstruct the whole framework of an extinct reptile or bird or mammal, so the pathologist and the practising physician, familiar with the laws of physiology, which, although modified, are not suspended by disease, have learnt that a disease commencing in one organ may involve, as a necessary consequence, widespread structural changes in other parts.

For a man ignorant of general pathology to claim to have special knowledge and skill in the treatment of some particular class of diseases would be as baseless an assumption as that of a would-be astronomer who, while ignorant of the elementary fact that the sun is the centre of our planetary system, pretended to have acquired a special knowledge of the orbit and phases of the moon, and the flux and reflux of the tides. Such a pretender would be rightly looked upon as the type and embodiment of lunacy.

It should be clearly understood that the main reason and justification for certain forms of specialism consists in the convenience, and even the necessity, of a division of labour, and not in the possibility of separating the body into different parts, and then making one of them the exclusive object of study and practice.

The second object which I have had in view, has been to insist upon the value of all physical means of diagnosis, and especially of two of the most recently introduced, the ophthalmoscope and the laryngoscope. No student, whatever his future line of practice may be, can be considered to have completed his medical training until he has learnt to use these simple but invaluable instruments, which have, in a very real and literal sense, shed an entirely new light upon a large and important class of diseases, and by the aid of which our knowledge of many facts tending to establish the correlation and interdependence of pathological conditions has been greatly extended.

I exhort you earnestly to avail yourselves to the utmost of the special opportunities which will be afforded you for obtaining a practical knowledge of these and other physical methods of diagnosis. And, in connection with this subject, I venture to protest against the rapid increase of small and uncalled for special hospitals. Most of these institutions, whatever personal advantage they may bring to those who promote them, are certainly not, on the whole, beneficial to the public at large. There are two ways in which their existence is a public detriment.

1. They divert funds from the general hospitals, most of which are in sore need of more liberal support.

2. By attracting special classes of patients, they lessen the materials for teaching which, in all the hospitals connected with medical schools, are utilised for the practical instruction of their students, and so obviously for the public benefit.

If there should be any amongst you who feel a painful shudder on first entering the dissecting-room or the operating theatre, you may be assured that, without any diminution of that reverence for the dead, or that sympathy with suffering, the loss of which would be indeed deplorable, you will soon cease to be troubled by those distressing emotions, the continuance of which, in their original intensity, would be a serious bar to your usefulness. The explanation of the fact that while painful passive impressions grow weaker by being repeated, the practical habits which they are designed to promote are formed and strengthened by repeated acts, is admirably given by Bishop Butler in the fifth chapter of the *Analogy*. The whole passage is too long to quote, but the substance of it is the following:—"Perception of distress in others is a natural excitement, passively to pity, and actively to relieve it; but let a man set himself to attend to, inquire out, and relieve distressed persons, and he cannot but become less and less sensibly affected by the various miseries of life with which he must become acquainted; when yet, at the same time, benevolence, considered not as a passion but as a practical principle of action, will strengthen; and whilst he passively compassionates the distressed less, he will acquire a greater aptitude actively to assist and befriend them."

Herein lies the explanation of the fact that a surgeon, while retaining all his active kindness of heart, becomes a bold and skilful operator, never losing his presence of mind, even in the most trying circumstances. A conspicuous example of the combination of these high qualities was afforded by the great surgeon who was the friend and teacher of many generations of students in this college. I scarcely need say that I refer to the late Sir William Ferguson.

Alfred Lord Tennyson, in a poem entitled "In the Children's Hospital," says of a surgeon, whom he introduces into the narrative, "He was happier using the knife than in trying to save the limb." I venture to express my conviction that the Poet Laureate never met with such a surgeon, and it is to be regretted that a great poet who has written so much to delight and instruct mankind should have given publicity to a fictitious character, the idea of which must surely have had its origin in a troubled dream. My experience of surgical practice differs essentially from that of the poet. All the surgeons with whom I have the honour and the happiness to be acquainted, whatever may be their political opinions, are, without exception, pre-eminently conservative in the practice of their profession; and, although they often have reason to be proud of the radical cures which they accomplish, they are staunch unionists. To bring about and to maintain union is always the first intention of the surgeon, and when, in an extreme case, he is reluctantly compelled to have recourse to dismemberment, he acknowledges with regret that the resources of civilisation and of surgery have failed to accomplish their primary aim and object.

When you come to the study of disease, you will learn that one of the most important duties of the practitioner is the correct interpretation of symptoms, the object being to get behind the symptoms, so as to ascertain their cause. And this great subject has a two-fold aspect: first, we endeavour to ascertain the seat and nature of the functional derangements, or the structural changes within the body which have given rise to certain symptoms, such symptoms as, for instance, pains or other perverted sensations, loss or impairment of motor power, difficult breathing, cough, palpitation, dropsical swelling, etc. Secondly, a most important subject of inquiry is what, in the habits or the surroundings of the patient, has caused his illness. In illustration of this, I need only refer to the numerous instances in which contaminated water or milk, or air-pollution by defective drainage or overcrowding, has been the cause of serious and often widespread disease.

During about ten days in the month of September, 1854, 600 people died of cholera within a very limited district in the neighbourhood of Golden Square; and this terrible outbreak was traced to the contaminated water of a well in Broad Street, to which the whole neighbourhood was in the habit of resorting.

In the prompt recognition and demonstration of such like sources of disease our profession is daily conferring incalculable benefits upon mankind. Who shall estimate the amount of suffering and of mortality daily and hourly prevented by the now general use of antiseptics in the practice of surgery?

But there are yet other fruitful causes of disease. Here I quote a sentence from Sir Thomas Watson. "It is ours to know in how many instances, forming, indeed, a vast majority of the whole, bodily suffering and sickness are the natural fruits of evil courses, of the sins of our fathers, of our own unbridled passions, of the malevolent spirit of others."

I have before insisted on the value and importance of physical methods of diagnosis; and now let me impress upon you that as man is something more than a cunningly devised machine, so he is the subject of disorders which escape all physical means of research. If you cultivate that power of sympathy with which all are more or less endowed, and the importance of which was so ably and eloquently insisted upon by the Lord Bishop of London in the address which he delivered here last year, you will learn that there are mental pains and disorders which exceed in their distressing results any merely bodily ailment. The student of physiognomy, as every practitioner of medicine ought to be, will often see in the anxious and troubled expression of the patient the mental source of his suffering, and so will not seldom find the way to afford relief.

The question will often arise in substance, though not in words, identical with that addressed to the doctor by Macbeth.

"Canst thou not minister to a mind diseased;
Pluck from the memory a rooted sorrow;
Raze out the written troubles of the brain;
And, with some sweet, oblivious antidote,
Cleanse the foul bosom of that perilous stuff
Which weighs upon the heart?"

It is not surprising that the unsatisfactory reply of the doctor should have driven the indignant inquirer to speak disdainfully of physic.

It may be that in some cases, as the doctor said of Lady Macbeth, the patient "more needs the divine than the physician;" but judicious medical treatment will often do much for the relief of this class of sufferers; and a method of treatment which has often proved successful is indicated by the physician who was ministering to the troubled mind of King Lear:

Our foster nurse of nature is repose,
The which he lacks; that to provoke in him
Are many simples operative, whose power
Will close the eye of anguish."

The successful result of the physician's treatment is shown in a later scene. The old king had slept so soundly that they had been enabled to change his garments without awaking him. When at length he is awakened in the presence of his daughter Cordelia, although his words and manner indicate the doubt and confusion of one just aroused from a terrible dream; yet the physician's encouraging language is fully justified:

"Be comforted, good madam, the great rage
You see is killed in him."

There are few results of medical treatment more entirely satisfactory than the calm which often comes over a delirious brain under the timely operation of an opiate; and one of the most important practical lessons which every medical man has to learn is the true use, while he avoids the abuse, of narcotics.

You will find hereafter, when you enter upon the practice of your profession, that, under the heading of Medical Ethics, many rules have been laid down for the guidance of the medical man in his conduct towards his patients and his brother practitioners. If we could all learn and earnestly endeavour to act upon the comprehensive maxim to love our neighbour as ourselves, to do to others as we would wish others in like circumstances to do to us, few additional rules would be required for our guidance. The very nature of our studies, and of our daily work, should teach us the duty of absolute truthfulness in all our dealings both with our professional brethren and with our patients.

Upon this point I may quote the advice of the sagacious though rather garrulous old gentleman, Polonius.

"To thine own self be true,
And it must follow as the night the day,
Thou canst not then be false to any man."

Perhaps it may not be without advantage if I forewarn you that to proclaim a truth is not seldom attended with unpleasant consequences. Thus, after due consideration, you deem it your painful duty to announce to a patient or, it may be to some member of his family, that he has an incurable disease. The result often is that you at once lose your patient, not by his death, but by his going to one consultant after another, in the hope that he will find someone to reverse your verdict, and to give a more hopeful opinion. The late Dr. P. M. Latham, referring to cases of this kind, said: "He consults an infinite number of medical men, and it is remarkable that he gets no comfort or satisfaction from those who understand his disease the best, and the greatest comfort and satisfaction from those who understand nothing about it."

Before giving utterance to an opinion as to the existence of an incurable disease, it is obviously the practitioner's duty to make sure of the evidence upon which his opinion is based. A hopeless prognosis deduced from insufficient evidence inflicts unnecessary pain upon others, and brings discredit upon the erring practitioner. But, having satisfied himself of the existence of a disease which is beyond human aid, the possibility of losing his patient in the manner which I have before indicated, should not deter the medical attendant from the timely intimation of a state of things with which, for various reasons, it may be of the highest importance that the patient and his family should be made acquainted.

Again, it may be that, after the expenditure of much labour and time, you discover some new fact, or you arrive at some conclusion from previously known facts which you believe to be both new and true, and of sufficient importance to be made public. Now, you will probably be disappointed if you expect that the publication of your discovery will be received with general acclamation. To borrow a sentence or two from *The Autocrat of the Breakfast-Table*, "Every real thought on every real subject knocks the wind out of somebody or other. As soon as his breath comes back, he very probably begins to expend it in hard words. These are the best evidence a man can have that he has said something it was time to say."

Although I have given you this warning, I trust that neither the anticipation nor the actual experience of factious opposition will hereafter deter any of you from earnestly contending for that which you believe to be true. Without doubt, the general reception of truth is often retarded by senseless and selfish opposition and prejudice; but truth is all-powerful, and in the end it will prevail.

It is sometimes painful to witness local and temporary rebellion against truths which all sane and sensible men have long accepted as indisputable. As an instance of this, I may refer to the notorious town of Leicester, a large proportion of whose inhabitants refuse to obey the law which wisely decrees that every child shall have the benefit of the proved

protection of vaccination. Now this is a subject respecting which it is quite safe to prophesy. It is as certain as that the sun will rise to-morrow that at no distant period small-pox will invade the town of Leicester, and that the result will be such a massacre of the innocents—innovent victims of parental ignorance and prejudice—as will probably suffice to carry conviction to that eccentric member of the House of Commons who lately had the assurance to ask for the appointment of a Committee to inquire into the practice of vaccination.

On the subject of consultations, I venture to offer a few words of advice. Some practitioners appear to think that the suggestion of a consultation implies a mistrust of their knowledge and skill, which they resent as a personal affront. Now this surely is a very short-sighted and selfish view of the matter, and one which takes no account of the natural anxiety of the patient's family and friends. The most skilful and experienced practitioners, clearly perceiving the limits of their own resources, and sympathising with the anxieties and fears of the patient's friends as to the result of a dangerous illness, are, as a rule, the most willing and anxious to agree to, and indeed are often the first to suggest, a consultation. On the other hand, the medical attendant has a right to expect that his feelings and susceptibilities shall meet with due consideration from the patient and his friends. When they desire a consultation, it is their duty at once to make their wish known to the gentleman in attendance. The practitioner has good reason for displeasure if, without adequate reason, he is taken by surprise, and finds that a consultant has been sprung upon him without notice. It scarcely needs to be insisted on that a practitioner who declines to join in a consultation when requested to do so by his patient's family incurs a grave responsibility.

It goes without saying that the welfare of the patient is the main and primary object of every consultation; that being duly safeguarded, care should be taken that the credit and reputation of the medical attendant suffer no detriment.

You will not, I trust, fall into the error of supposing that when you have completed the usual course of lectures and examinations, and have obtained your legal qualification to practise, your student days are at an end. The conscientious practitioner of medicine must continue to be a diligent student to the end of his active life. When a man is too old to learn, he is too old to practise. In these days of active research, continual additions are being made to our knowledge of subjects more or less directly bearing upon the science and practice of medicine. The science of bacteriology is of comparatively recent origin, but it has already been productive of a copious literature, and has been fruitful of lively controversy. Amidst much that is as yet open to doubt and discussion enough has been firmly established to entitle the workers in this new and difficult field of research to the gratitude of mankind. Although those who possess the requisite qualifications and opportunities for successfully conducting researches of this kind are comparatively few; on the other hand, there are few who cannot avail themselves of the practical results arrived at by others.

As, in general terms, knowledge is power, so every addition to medical knowledge brings with it an increased power of doing good to our fellow men, and the conviction of this fact should act as a continual stimulus to exertion.

That which Lord Bacon has eloquently said of all knowledge is in an especial manner and degree applicable to the knowledge which it will be the chief business of your lives to acquire, and to use for the benefit of mankind. "It is not a couch whereupon to rest a searching and restless spirit, or a terrace for a wandering and variable mind to walk up and down with a fair prospect, or a tower of state for a proud mind to raise itself upon, or a fort or commanding ground for strife and contention, or a shop for profit or sale, but a rich storehouse for the glory of the Creator and the relief of man's estate."

HOW STRINGENT "LIQUOR LAWS" ARE EVADED.—The subterfuges to which the lovers of alcoholic beverages resort in the States where the sale of alcohol is forbidden, afford a never-failing source of amusement to American journals. One of the latest stories comes to us from the *Therapeutic Gazette*. In Iowa, a recent law prohibited the sale of alcoholic drinks; coincidentally, the sale of a reputed medicine called "Hopeine" appeared to increase; one drinking saloon, which had gone into this trade in "Hopeine" rather extensively, was prosecuted. Various witnesses were called, who swore that they had partaken of "Hopeine," and nothing else. "Do you know," said the judge to one of the witnesses, "the difference between beer and whiskey when you taste it." The witness said he did. "Now," said the judge, "you will tell the jury whether Hopeine that you drank was beer or whiskey, and you will be committed to gaol for contempt until you answer the question." "It was beer," said the witness.