

An Introductory Address

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GENTLEMEN,—When the Dean of the Faculty of Medicine honoured me with an invitation to open the session of this college I accepted it with pleasure. He informed me that it would be my duty to deliver a short address to the students, and more especially to those of them who are devoted to the study of medicine. These students I heartily congratulate upon their selection of a profession. There are some worse professions, but there are few better, and to him who loves the work there are none better. Whatever the social rank, whatever the dignity, whatever the rewards of the profession, it possesses unquestionably one good thing, and that is hard work. From the day upon which you enter upon the special study of medicine to the day when you will lay aside the stethoscope and the thermometer your life will be full of hard and interesting work. You will have work, some with payment, some without payment; some with abundant gratitude, some with none. You will receive much that you will not deserve, both of praise and blame, but the distribution of the two, however unwisely or unjustly each be awarded, will be, perhaps, on the whole, not far from being a fair measure of your due.

That the treatment of the profession and the estimate of its work by the public are often unjust can hardly be questioned, and who can wonder at it when we bear in mind the usual education imparted in our schools and universities? By education is generally meant the study of books and of ancient literature, while nature and its laws, life with the forces which act upon it and the circumstances in which it develops and those in which it fades are disregarded. The elementary facts upon which science is built are considered as scarcely worthy of attention. They are treated as if they had but little concern with life and none with learning and scholarship. The result is that ignorance prevails with regard to those laws which govern our life and actions. This is the case generally, in the upper as well as in the lower classes of society, and ignorance and superstition in respect of medicine, of the power of drugs, and of the skill of medical men are as prevalent among the educated as they are among the uneducated classes. "Christian Science," with its claim to cure all diseases by ignoring them, flourishes most among the upper classes. Here it appears in gorgeous colours accompanied with the sound of trumpets, while at the other end of society it is found presenting a humble but obstinate front in the coroner's court or before the police magistrate in the persons of its loyal devotees known as the "Peculiar People." Besides these immaterial means of curing diseases such as inflammation, paralysis, toothache, tuberculosis, and cancer, there are a countless number of undiscovered drugs, known only to their proprietors and the officers of the Patent Office, which for good reasons are not made known to the public, each of which, according to the proprietors of, and believers in, these panaceas, has performed marvels in preventing and curing diseases, known and unknown, fatal and not fatal—indeed, it matters not of what nature, for all diseases, it is said, are cured by these undiscovered drugs. The astonishing fact is that any disease remains to afflict the human frame.

You ask me where I obtain these extraordinary facts. I reply: Look at any newspaper, daily or weekly, English or Welsh, religious or secular (among the latter, however, there are some notable exceptions), and you will find all that I have stated. You will see accounts of marvellous and impossible cures and statements of effects produced by drugs which everyone possessed of the most elementary knowledge of the laws of health and of the processes which take place in the living body knows to be entirely devoid of foundation. Nevertheless, these statements are published

broadcast, day by day and week by week, in newspapers which profess to teach and to lead the public and to form public opinion. These newspapers are the property of men who hold more or less influential positions and are respected in the country. They are edited, some by clergymen, some by ministers, and some by laymen. The statements which I have referred to are sanctioned, by silence, in speech, or in writing, by all concerned in the publication of these journals. They occasionally contain testimonials to the wonderful virtues of the advertised drug, and these emanate from all manner of men, some of whom are probably, like the historical camel, evolved in a garret, while others hold positions and make professions which would lead one to expect that they would not be guilty of attaching their names to, or be a party to publishing, anything for the truth of which they could not vouch. Now and again a bard in a frenzy of inspiration pours forth in rhythmic or alliterative measure the wondrous works of quackery and the miracles of ignorance. When I find the religious newspapers of the Principality besmeared with such advertisements as I have referred to, some of them not only false but foul and wicked, I cannot help feeling the blush of shame as I bear in mind under whose ægis they are published. The faithful, finding them in their weekly guide, accept them without question and act upon them as truths tested by the standard, sanctioned by their party oracles and sealed with their approval. How long will this continue? So long as the practice will pay the manufacturer and purveyor? Is it not possible to cause the purveyor at least to realise the character of the material to which he forms the conduit from the manufacturer to the purchaser? If this be not possible then the remedy must and will be found in the education which, if not now, will by-and-by be given in our schools. Let the elements of science, the laws of growth and decay, and the laws regulating the functions of the living body be taught in our schools and our young men and young women will themselves be able to estimate this mephitic rubbish at its proper value.

Meanwhile, however, and notwithstanding what I have just said, I congratulate you upon the choice of a profession, for it is a noble and an ennobling one. The circumstances and surroundings in which you will be placed for the next five years will tend to foster in you, if not the graces and polish of society, yet those qualities which are usually admired—sometimes laughed at—but never laughed at either by rich or poor when they are the victims of suffering and disease—and these afflictions come to poor and rich alike. To poverty and pain, suffering and sorrow, disease and death you will pay your daily visits. Your work will be on the dark side of life—not seductive, is it?—but this will enlarge and widen your sympathies (not of the frothy sentimental variety), whet your wit, increase your resources, and humanise you through and through. Yes, gloomy as the prospect appears, you are to be congratulated, provided you are made of the stuff of which good doctors are made.

Now, what are the qualities which are necessary for the exercise of a profession whose work is such as I have indicated? They are many, but I shall be able to refer to two or three of them only. Some of them are gained only after a long training and large experience—"knowledge comes but wisdom lingers"—while others should be possessed from birth or acquired in early life. Of the latter the first is health—a sane mind in a healthy body. To the boy destined for the medical profession good health is essential—in the first place to enable him to bear the physical and mental strain made upon him by the training through which he will have to pass in order to qualify, and in the second place by the physical demands and mental anxiety arising from practice. Success in medicine, as in some other professions, means survivorship, and survivorship usually means a good physique. A man with feeble health may be a great preacher, a great lawyer (though I can hardly imagine him to be a great pleader), a great writer, or a great scientist, but he cannot be a great medical practitioner, for disease and suffering recognise no office time or any day of eight hours. The medical man must be ever ready and ever active and must know no fatigue. But I hear you say, "Health is inherited, a sound constitution cannot be acquired." This is true in a great degree, and a lad of feeble health would do wisely to eschew the profession of medicine. It is, however, also true, that good health may be destroyed, that bad health may be made good, and that a

feeble constitution may be strengthened, especially during the period of childhood, boyhood, and early manhood.

Some years ago elementary schools were not so numerous in the country, or perhaps so efficient in some respects, as they are now. I cannot vouch for the accuracy of the latter part of the statement, for I am speaking of that happy time, for schoolmasters as well as for boys, which preceded the period of periodical inspections and payment by results. For the reason which I have mentioned children had to walk to school from one to three miles in the morning and home again in the evening, carrying with them their midday meal. To accomplish this distance a boy took from an hour and a half to two hours in the morning. He reached the school-room at 9 o'clock and was supposed to work until 12 o'clock. Then followed a relaxation from work lasting two hours, a few minutes of which was occupied in partaking of a very simple meal, but a meal which was consumed with a relish and an enjoyment which many a luxurious epicure would give all but his dinner to possess. This meal, frugal as it was, was ample for the child's requirements. Then came the great pleasure of the day, hockey, football, or hare and hounds (cricket was unknown in country schools in those days), than which no exercises, games, or gymnastics are better calculated to develop all the organs of the body in a healthy manner. Thoroughly refreshed but untouched by fatigue the boy entered school again at 2 o'clock and remained until 4 o'clock. Then came the journey home, which occupied in winter at least two or three hours and in summer from three to four, with all its delightful incidents, unclouded by the thought of a home task—a new imposition condemned by every healthy-minded boy. The boy never took the straight path (boys never do) or the shortest route. His curiosity, his inclination, his spontaneous energy, call it what you will, led him to deviate to the right and to the left from the normal course. He, moreover, required amusement and play after his exhausting labours in the schoolroom. There were various objects of interest which had to be visited on the way home. In a pool a mile up the stream on the left was the old trout, which had to be tickled or presented with various cunningly-devised invitations to land, to which his wariness never condescended to reply. On the right was the track of a hare. This had to be carefully inspected, while the discovery of a gin was a source of intense enjoyment and the division of its string afforded a doubly exquisite pleasure, for it ensured "puss" a free run and balked the cunning and skilful poacher in his nefarious designs. Then the nest of an old crow upon a high and solitary tree should not be forgotten. It was some distance off, it is true, but it demanded a daily visit in the spring of the year, and the strongest and bravest boys climbed up in turn to inspect and count the eggs and in the end generally to rob the nest. This would sometimes lead to a falling out—an event which is said to happen not rarely among thieves, but in this instance the honest bird did not come by its own. The encounter took some time to come to an issue. Unfortunately the morning told the story of the evening and this led to the application of the appropriate but unpleasant remedy. This old remedy has now gone out of fashion. Some of you may have known such delightful school-days, while others may have not, but may from early days have been subjected to the dull continuous grind which is productive of a precocious and showy but feeble mind, coupled with a body one would not accept as a gift. Such a boyhood as that which I have described braces mind and body, strengthens weak frames, and makes healthy youths. I confess that I look back upon this period in my life, not only as one of the pleasantest and brightest, but also as one of the best spent, for its effects have been my mainstay during the rest of my career. As so much may be done during boyhood and early youth to establish health and to lay in a store of strength which will serve your turn through life, I would urge you to seize opportunities for physical exercise, for I imagine that during your sojourn here these opportunities will be abundant. When you shall have left Cardiff and have gone for your further training to London or elsewhere you will find such opportunities scanty by reason of the fuller employment of your time as well as the distance of your lodging from the green fields.

The training of a lad for the profession of medicine cannot be begun too early, and particular attention should be paid in his case to that part of education which should, in a greater or less degree, be the possession of every youth whatever his

position in life when he leaves school—the training of his senses. All boys should be trained to use their eyes, their ears, and their hands—for it may be said of many, "They have eyes but they see not, and ears they have but they hear not"—and to acquire manual dexterity. Every lad should be taught early to use his eyes, to see and recognise the various objects, living and dead, which nature so bountifully supplies in earth, air, and water. To a medical man this training is of special importance, for the faculty of observing is one of his chief aids. Without it he is helpless, he is not fit to visit or to treat the sick. The cultivation of this sense cannot be begun too early. I will illustrate its value, not from a professional visit to the sick-room, but from an entirely different phase of life.

A party were once upon a coursing expedition, but their wanderings in search of the hare had proved fruitless. Like incompetent craftsmen who blame their tools they blamed the land and the farmer, for they had come to the conclusion that there was no game on the land and that the farmer was a poacher. Disappointed and despairing of sport they were on the point of giving up the search when a man approached who was known to one of their number as an accomplished poacher. He said to the new-comer, "Dafydd, swllt am scwarnog." "Yn wir?" queried Dafydd; "cewch, yn wir," was the reply. Satisfied as to the ability and willingness of the would-be sportsmen to pay the shilling Dafydd walked quietly around and in a few minutes the cheery cry of "See-ho" fell on delighted ears. The hare was coursed and caught, thanks to the dogs and the cultured Dafydd. "Swllt am un arall," and in a short time the same pleasant cry was heard again. This illustrates well enough the difference between the trained and the untrained physician when visiting the sick-room. The sportsmen with the untrained eyes had walked over the land the whole day and had seen nothing, while the poacher, whose delight in the daytime and on shining nights had been the study of "puss" and her habits, whose eyes had been trained from boyhood to discover her on her form and to watch her on her quiet or hurried rambles or gambolling with her mate in the light of the queen of night, readily and surely discovered her hiding-place. The experienced and cultured physician, in like manner, when he visits the sick-room sees at a glance those visible signs which reveal the past and lift the veil which hides the future, while the untrained man sees nothing and learns nothing—to him the past remains a blank and the future hidden.

Again, every child should be taught to use his ears and his hands. Singing is in some degree taught in most schools; drawing, with some amount of handicraft, might also be taught with great advantage. Children are taught to play on the violin, harp, or piano from early years. A small fiddle is obtained for the little fingers which cannot stretch over the stops of the finger-board of the full-sized instrument. It is only by beginning his training at an early age that one becomes an accomplished performer on one of these instruments. A touch, a stretch, a strength of finger, and a certainty are thus acquired which cannot be gained in later life. The ear also is trained to distinguish and appreciate sounds in their tone, pitch, volume, and character. By training the hands a manual dexterity with a delicate sense of touch capable of appreciating slight vibrations and slight differences of resistance and elasticity are acquired, all of which are of the greatest value to the practitioner in the diagnosis and treatment of disease. A trained hand can often by palpating the chest alone discover the seat and sometimes the nature of disease, while its use in the diagnosis of disease in other cavities is constantly called into requisition. A trained ear, again, is of no less importance in the detection and appreciation of the various sounds which are produced in the different organs of the body both in health and disease, and it renders possible a diagnosis of the nature, seat, and extent of diseases which would not be possible without its aid. Training of the eyes and hands is as essential to a medical man as it is to an artist, and training of the ears and hands is as necessary to him as it is to a violinist or a pianist. The education in elementary schools should be a training and not a cramming, such as it is apt to become when estimated by so-called results. It should be a training calculated to help a lad to live a better, a happier, and a more intelligent life in whatever station he be placed. It should be the same for all. No difference should be made between the education of the son of the labourer, or the son of the farmer, of the parson, or of the medical man.

To the delightful pursuits I have mentioned must be added, when the lad has passed to a higher school, others of a different character. Books will then be his chief, although perhaps not his only, study. It becomes a question whether in these schools a difference should be made in the education of youths destined for different callings in life—whether that of one should be on ancient lines and that of another on modern lines, that of one classical and that of another scientific, or that of one literary and that of another commercial. It is still held by some that the best preparation for all professions is a classical education, but the more general opinion is that a difference should be made and that other subjects should be taught in addition to Greek and Latin. In many of our schools there is an ancient side and a modern side, and boys destined for certain pursuits are placed in the former while others who intend to follow other vocations are placed in the latter. For all, however, for whatever calling they are destined, a certain general training is given. The subject, however, which is of interest and of importance to you is what is the best, or at least the best attainable, general training, the best attainable culture, for a boy who prepares for the study of medicine. The answer to this, made long ago and partially acted upon to this day, is a classical training. This answer, however, should be reconsidered in the altered state of medical knowledge.

In the higher schools a great part of a lad's time is devoted to learning the Greek and Latin languages and to making acquaintance with their literature. Greek was for centuries the language of Christianity and philosophy and it was also the language of theology and science. At a later period the discovery was made that the dogmas of theology could be rendered in Latin, and therefore Latin became the language of the Church and of science. It continued to be such until comparatively recent times. In these two languages, after the revival of learning in Western Europe, was enshrined practically all learning. Greek and Latin became known as the learned languages, and a knowledge of these languages was necessary as an introduction to the learning and "scholarship" of the time. This educational *régime* ruled up to a period not long passed and all boys who received a higher education, whatever their pursuit in life, had to learn the learned languages. I have not a word to say against classical scholarship, but there is much to be said upon the question whether a boy preparing for the medical profession should devote several years to acquire a knowledge of the two languages. The training for the three professions of theology, law, and medicine is in many respects much alike. There is a special training for each, but before this is entered upon a course of general training has to be passed to fit every candidate for admission to either of the three—for the pursuit of his special studies. For the three professions this general training is, and always has been, much the same. Take the clerical profession. The preparatory training is chiefly, if not entirely, a study of Greek and Latin and their literature. This study is pursued in the higher schools and afterwards in the university. When the university course is finished the aspiring cleric, in the best arranged schemes, enters a school of divinity to study his special department of learning for two years before he obtains a licence to practise his profession. In the case of the clergyman the whole course of his education, from the time he enters a higher school, is a preparation, a special preparation—as special a preparation for the study of his special subject as the study of science is for the special study of medicine. In the case of the law the preparatory studies are the same as those for theology, a knowledge of Latin being essential to a learned lawyer.

What is the value of a knowledge of Greek and Latin to a professor of the art of medicine? I will tell you in the words of a distinguished writer and scholar who has recently passed away: "As to doctors, can we gravely admit that they ought to understand the language in which their prescriptions are written, and that they find it instructive to read Galen and Hippocrates in Greek? To men of science it is pointed out that their ever-increasing technical terminology is systematically formed from Greek and Latin words. This is true: and it is also true that a man of science might obtain a perfect grasp of this terminology by means of a list of words that he would learn in a day and the use of a dictionary that he might acquire in a week." Although useless to the medical man in his profession, however, yet it may be necessary to know Greek and Latin in

order to understand English, to develop the mental faculties, and to gain general culture—then, indeed, it is worth even the medical man's while to devote the time to learn these two languages. I will let the same writer reply again: "The fact is that the study of Latin (for Greek, except in respect of scientific terminology, has much less to do with the question, and would hardly have been placed on a par with Latin here but for the hasty and random way in which the stock arguments on the question are continually repeated) cannot tell us what the English language is; it can only help us to understand how it has come to be what it is. In order to learn to speak English with accuracy and precision we have but one rule to follow—to pay strict attention to usage." But it is said, "If we do not teach a boy Latin or Greek we cut him off from the highest literary enjoyment, and we prevent him from developing his taste by studying the best models. It would avail little to call in question (had I space and inclination to do so) the surpassing excellence of ancient literature. For my purpose I must regard this point as decided by an overwhelming majority of persons of culture. But it will not be denied that in the English, French, and German languages there is a sufficiency of good literature to fill the leisure of a person engaged in any active calling, a sufficiency of work calculated to give a high kind of enjoyment and to cultivate very adequately the literary taste. And if such a person was ever visited by a painful hankering after the time-honoured volumes that were sealed to him, he might console himself by taking note how often his contemporaries who had enjoyed a complete classical education were in the habit of taking down these masterpieces from their shelves. For I cannot help thinking that classical literature, in spite of its enormous prestige, has very little attraction for the mass of even cultivated persons at the present day. I wish statistics could be obtained of the amount of Greek and Latin read in any year except for professional purposes, even by those who have gone through a complete classical curriculum. From the information that I have been able privately to obtain I incline to think that such statistics, when compared with the fervent admiration with which we all speak of the classics upon every opportunity, would be rather startling." The fact seems to be that, with comparatively rare exceptions—and those are not in the professions—a classical education is pursued not for the culture which it gives but in order to acquire the instruments for special pursuits in after life, such as theology, law, philology, history, archaeology, the profession of teaching, &c. Those who prepare for such pursuits specialise from the first, for they devote themselves from the beginning of their education to gain command of the instruments with which they work in after life, while those devoted to science are made to learn that which is of little or no use to them in their after-pursuits. For the latter and to a lad destined for the medical profession matters at present are still worse, for what command does he acquire over the Greek and Latin languages? Greek is not now compulsory, while the knowledge of Latin demanded of the medical student is so small that it does not enable him to read the easiest Latin book except with difficulty and with the aid of a dictionary. The time—a part of six or seven years—devoted to gain such an accomplishment appears to be wasted. What, then, should a boy destined for medicine learn before he begins his special studies at the age of 17 or 18 years? I should say that in addition to those subjects which are generally taught in schools he should have a thorough course of the English language and literature. This will do more to train his intellectual faculties, to give him a command of language, a vocabulary, a taste for good literature, and a culture far larger and better than he can obtain by acquiring an elementary knowledge of Latin, which will be of no use to him, is too scrappy to be a source of intellectual enjoyment, and which will in a short time be forgotten. French and German should also be learned, and I believe the power of reading both languages with ease could be acquired in the time now devoted to learning Greek and Latin. A knowledge of these two modern languages is essential to a practitioner who is desirous of being among the leaders of his profession, for the work done in the laboratories and hospitals of France and of Germany is of such a high order that no one who is ignorant of it can be considered abreast of medical knowledge.

There are, however, some among you who are fortunate enough to have another accomplishment—a knowledge of the

Welsh language. You should study it with the same care and minuteness as you study English, or as you would study Greek and Latin were you devoted to classical pursuits. In the time which you now devote to Latin and Greek you would acquire a thorough knowledge of this ancient tongue. I am not in a position to compare or contrast the value of Celtic with that of classical studies—your professor of the Welsh language might do that for you—but there are certain distinct advantages to you in the study of Welsh over the study of the dead languages. You already possess a more or less large vocabulary of the language; you can speak it; you know its idioms; your ear has been trained to its accentuation, the inflexions of its vowels, and the mutations of its initial consonants. A knowledge of its grammar can be gained without much difficulty. Prose composition will prove a pleasant and improving pastime, and if verse-writing be of any value in education you may indulge in it with at least the feeling that you know the material in which you are working and that you are not arranging words of whose meaning you have no full appreciation in a form of which you have still less. The alliterative *pedmar mesur ar hugain*, together with the numerous rhyming measures in the language, will give you an ample field for the exercise of your vocabulary and for the display of your skill in polishing sentences. Translations from English into Welsh, and from Welsh into English, and from French and German into English and Welsh will further add to your linguistic skill and give you accuracy in the use of words. The Welsh language, moreover, will introduce you to a valuable and interesting literature, unknown to, and unappreciated by, our neighbours between Offa's Dyke and the German Ocean, while it is the subject of study to scholars in Western Europe. As a means of culture the language and literature of Wales have not been duly appreciated in England, or, indeed, in the Principality itself. Some years ago a request was made to the Senate of the University of London that Welsh as well as French and German should be recognised as a voluntary subject in the matriculation examination. Together with others I wrote to some members of the Senate stating the reasons why I thought that that body should accede to the request. Among those reasons were: (1) that a number of the candidates for the matriculation examination were Welsh lads many of whom habitually spoke Welsh while some did not speak English until they were 13 or 14 years of age; (2) that the whole of the examination was conducted in a language foreign to these lads; and (3) that consequently they laboured under a great disadvantage when compared with English candidates especially and even when compared with French and German candidates, for although English was a foreign language to French and German boys each could select his own language as a voluntary subject. One of the members who appeared to take some interest in the subject replied by asking, "Where are examiners to be found?" The foundation of the Welsh University has removed this inequality, and the Welsh boy may now study his native tongue with the feeling that his knowledge of Welsh language and literature will receive due recognition in the schools of the university.

The course of instruction which I have indicated will, under the circumstances in which you are placed, and especially by reason of the limit of time which you can devote to general subjects, do far more for you than a fragmentary knowledge of Greek and Latin. It will develop your intellectual faculties, it will furnish you with a large store of linguistic and other knowledge, and it will introduce you to the best literature and the highest culture. It will, moreover, place you in the best position to begin and continue your professional studies, it will enable you to follow the progress of medicine in after life, and it will furnish you with an inexhaustible store of intellectual enjoyment from which you will be able to draw at will in the leisure hours of your active life. While, however, you pursue these general studies a part of your time should be devoted to acquire an elementary knowledge of the natural sciences so that when you go to college you may be prepared to enter upon those studies which bear directly upon your profession. You should possess an elementary knowledge of the principles of physics, chemistry, and biology, have a grasp of the general character of science, and be disciplined more or less in the methods of all sciences, so that in your first year at college you may be able to take full advantage of the means of study

there afforded to you. There you will pursue the study of anatomy, physiology, and chemistry which will fit you for your further studies in the wards of the hospital. Facts will be pointed out to you and you will have to find and see them for yourselves; their relations and classifications will be indicated to you and you will have to verify them; your minds will be trained in scientific methods. This will occupy the first three years of the curriculum, and then, if you have been diligent, you will pass on to the supreme stage—the study of medicine. In the wards of the hospital you will have to study disease in its relations, its causes, its onset, its course, its terminations, its prevention, and its treatment. You will not only be required to see and to realise what is pointed out to you but you will also be required to learn how to see and discover for yourselves, to observe symptoms, to discover signs, to classify them and reason upon them—work in which not only your trained intellect but also your trained senses will be called into full exercise. If you shall have availed yourselves of the opportunities of learning offered you during the three years you will have passed in college you will find your knowledge of disease and your skill in detecting its seat and nature grow apace. Most of your time will be spent in the out-patient rooms or in the wards, performing your duties as clerks or dressers or attending the physicians and surgeons on their daily visits. You should, however, not be satisfied with discharging the merely obligatory portion of your hospital duties. It is said that the best way to know a man is to live with him. It is equally true that the best way to know disease is to live with it, to reside in hospital; and it should therefore be the aim of each one of you to hold a resident post as house physician, house surgeon, resident obstetric officer, either one or all. Such a post will give you in a few months an amount and a kind of experience that private practice will not furnish. It will give you opportunities to watch the progress of disease from hour to hour, to observe closely its features, follow its fatal footsteps, or hail the amelioration of its severity under the treatment administered and the restoration of the patient. Moreover, you will be working under the eye of your master physician or surgeon; you will be required to "get up your case" fully and thoroughly and to record its progress from day to day. This will implant in you careful and methodical habits which are invaluable in the practice of medicine.

There are a few more words I should like to say. You should cultivate independence of character and freedom of thought. The two generally go together and both will be essential to you in the practice of your profession—both for your own comfort and for the good of your patients. The curriculum which you will pass through will tend to foster these qualities and your experience in hospital and in practice will tend to strengthen them. Tradition has no authority in medicine. I have already referred to the ignorance of science and its methods which prevails generally. Ignorance is rarely modest or doubting; it is dogmatic and credulous. You will find it often a source of great annoyance to yourselves and of infinite mischief to your patients. For your own happiness you should cultivate that absolute indifference to the chatterings of incompetence which is based upon a thorough knowledge of your profession, a complete grasp of your cases, and a rigid adherence, undeflected by outside considerations and influences, to the evidences of your senses and the dictates of your reason.

From the day on which you enter the hospital until your course is finished, the circumstances in which you will be placed and the influences under which you will work will arouse in you the feeling of humanity and foster its growth and development. It is scarcely possible for you to walk the hospital without becoming infected with the contagion of sympathy, but the sympathy is not of that variety which evaporates in sentimental speeches on platforms and finds its reward in publicity. It is of more lasting stuff. It is not the sort which shows itself in cries of impotence in the presence of difficulties and flees from the presence of suffering. The sympathy which will be yours is at its best in the presence of suffering and danger. These serve but to strengthen it. It is not a sympathy for fine days and holidays, processions, and public meetings; its work is amidst the storms of life; there is no place for it amidst the frivolities. It seems as if asleep or dead when there is no work for it; it is aroused only by the call of distress, to which its response is never wanting, and when aroused it is always to some purpose. I cannot illustrate this better than with the old story of the

man who had fallen among thieves. There he lay by the roadside, stripped, robbed, beaten, wounded, bleeding, unable to cry for help, and left half dead. By chance a wealthy and a holy man came down that way and when he saw the sufferer he passed by on the other side; and likewise another who came and looked upon him and passed by on the other side. Lastly, a man with an ass came where he was, and when he saw him he had compassion on him and went to him and bound up his wounds, pouring in oil and wine (the antiseptics and healing drugs of the period), and set him on his own beast and took him to an inn (the nursing home of the day) and took care of him. I verily believe that this good man must have been a doctor. I know of no finer example of that sympathy of which I speak and which you should not fail to cultivate.

An Address

ON

SOME PROBLEMS OF TROPICAL MEDICINE.

*Delivered at the London School of Tropical Medicine on
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GENTLEMEN,—When in compliance with the request of Dr. Patrick Manson I consented to deliver to-day the opening address to the students of this School of Tropical Medicine, I felt that I was committing myself to a task really beyond my powers. This feeling was deepened on glancing over the formidable syllabus of lectures and demonstrations to be given by the teaching staff. The ground to be covered is so vast, the subjects to be dealt with are so very important, the extensive and diversified knowledge required both in teacher and student is so deep and so wide, as to make one's own ignorance painfully apparent to oneself. I therefore find comfort in the fact that I am here to-night because I am an administrator, not because I am a doctor of medicine.

I understand that the objects of this school are to convey to its students a special acquaintance with the diseases that are of most frequent occurrence in tropical regions and to train them for the investigation of such maladies on systematic and scientific lines. There is excellent reason for believing that Her Majesty's Secretary of State for the Colonies took very seriously to heart the deplorable mortality among public officers and others in our more unhealthy tropical possessions. The calling into being of this school is but one of the many means devised or fostered by the Right Honourable Joseph Chamberlain for curtailing the death-roll of our fellow-citizens in those insalubrious over-sea territories of the empire. This school is but one link in the chain, and the chain is already a long one and it promises to be continuous.

THE TRAINING OF COLONIAL MEDICAL OFFICERS.

The leading idea of the school, therefore, is the appropriate training of colonial medical officers. It is, however, to be hoped that others may take advantage of it and that it may add another ring to the ever-widening stem of the already gigantic tree of medical knowledge. It is certain that there are a great many people in this country at the present moment suffering from what are usually called "tropical diseases," and that these sufferers are not, and cannot be, attended by medical men who have had tropical experience. Very many of these patients must come under treatment by the ordinary medical practitioner. Cases could be adduced in which some of the most distinguished men in the medical profession in this country have been completely at sea as to the exact nature of certain tropical diseases and their sequelæ. The teaching supplied by such a school as this should be a useful addition to medical men practising in this country, especially if cases of tropical diseases in sufficient numbers can be made available to them for clinical study. The list of students who have passed through the courses since Oct. 1st, 1899, does not show, however, that

the school is patronised by the British medical practitioner. Taking into account the already immense and still growing traffic and the rapid and steadily accelerated communication between this country and the tropics, and bearing also in mind the intolerance of any form of quarantine in the United Kingdom, the probabilities are that the special study of tropical diseases will constantly be more and more forced upon medical men in practice in this country, either by the systematic study of such maladies at the ordinary schools of medicine or at specific institutions such as this. If this branch of medicine is neglected, then the sufferer from the tropics will be a certain loser, but not always the only one.

At the present moment, however, many of us are very specially interested in this school in relation to the medical services of our more unhealthy tropical colonies. It is probably the case that not a few of those who have so far passed through this institution were already familiar with many tropical diseases, knew them by experience, and understood how to treat them. To students of that category the clinical studies of these maladies here is not nearly so important as is the training to be had to fit them to investigate tropical diseases on the spot, on the most advanced systems known to medical science and with a full knowledge of what has already been done in these matters in this country and elsewhere. Any average medical officer who has sufficient training in making investigations of this kind will soon master the practical details of all tropical diseases in his district, provided that he is given time, the necessary instruments, and proper accommodation. The best and most proper place for making such researches is undoubtedly the tropics themselves. It must be patent to every person who thinks at all on the subject that the training of medical officers to carry out investigations of this kind is of the utmost importance to each colony, to the empire, and to humanity at large. We all know, or ought to know, what has been done in this field by such men as my late highly esteemed friend Dr. Bancroft of Brisbane; by the distinguished Dr. Patrick Manson, the inspiring genius of this school; by the father of Strachan's disease, the present chief medical officer of Lagos; and by many others who have practised medicine in the tropics. These men had no specialised opportunities given them; they had not the advantage of any systematic training such as is offered now at this school. We are therefore justified in expecting a great deal from the younger men who now come forward here to learn at once the most suitable and the most advanced methods of conducting original investigations in the great and rich tropical field.

STATE ENCOURAGEMENT OF MEDICAL RESEARCH.

But I can tell you that this training and preparation will not yield all that we are justified in expecting from it without the coöperation of the Secretary of State for the Colonies and of colonial administrators. The trained medical officer must have time and opportunity granted to him. That the Colonial Secretary will in every possible way encourage and suitably recognise the researches of medical officers may safely be taken as granted. It is, however, at times a very difficult matter for an administrator so to arrange service affairs as to be able to grant to medical officers the time so necessary to carry on scientific investigations of this kind without their being submitted to grave or destructive interruptions. Colonial administrators and others in high authority have not always in the past lent to the head of the medical department the support required by him. They have not always given to their chief medical officer the confidence that Alexander the Great extended to his. I was myself very fortunate in the first new country in which I served in having as chiefs such enlightened men as Lord Stanmore and Sir William des Voeux. Whatever was really required for the new medical service in Fiji was granted. As one result of that there is no doubt that at the present moment the chief medical officer of that colony, Mr. Glanvill Corney, is thoroughly familiar with the practical aspect of every disease met with in that country. Many other colonies have been less fortunate, but if that is so now Mr. Chamberlain, who not only thoroughly understands the value of medical work but also takes the deepest interest in it and has done more than any other person ever did before to popularise scientific medicine, is just the man to see that medical matters are put right wherever they are wrong. They are, in my humble