

inorganic world, in order that you may be prepared to understand the more complicated ones which present themselves in living beings. And this kind of knowledge experience shows to be directly proportional to the time and labour spent in acquiring it, and therefore, labour and time being limited, inversely proportional to its extent—i.e., to the number of things you attempt to learn.

The science of medicine—that is, all that you have to learn in addition to the technical knowledge you require for practice—relates, strictly speaking, only to diseases and their remedies, comprising pathology and pharmacology; but these subjects, as we have seen, are so inseparable from the larger subject—physiology—that the three must be considered as one, to the learning of which the same principle is applicable as to the study of the preliminary subjects. Your object should be not to store your memory with facts as they are called—these being often only dogmatic statements—but to understand the natural order of phenomena. This understanding you may gain by reading, and still better by attending lectures and demonstrations, but experience teaches that the knowledge so obtained does not become real until you have begun to observe for yourselves. The notions that you acquire without this are not only soon forgotten but, even during the short period that they are still sharply defined in the memory, are not believed in, and consequently the knowledge which is built up of such notions has something in it of the nature of sham. Now in the medical department of the college we have always done our best to guard against this, by developing to the utmost of our power the practical side of our teaching. It was in University College that the first course of practical physiology ever given in England was organised by Dr. George Harley, twenty-eight years ago, under the auspices of my illustrious predecessor in the chair of physiology. Since that time we have endeavoured year by year to advance in the same direction, notwithstanding many difficulties. One of the greatest of these was want of space—a difficulty which, I am happy to tell you, is now removed. In the new Science Wing we have been provided with magnificent working rooms, of such size that we can offer to each individual student a separate working place. In entering to-day on the occupation of these working rooms, it is right that we should express our gratitude to the Council, and to the generous contributors to the building fund, who have given us so noble a proof of their appreciation of the value of scientific teaching and research; and not least to the architect, Professor Hayter Lewis, to whose skill and foresight we owe so much in adapting the building to its purpose. This purpose is primarily practical instruction; but in addition to this the new laboratories will offer advantages not to be obtained elsewhere in London to all who desire the opportunity of working for the advancement of medical science by new investigation. To all such we bid welcome in the terms of our motto—“*Cuncti adsint*.” venturing to hope, that however insignificant the means at our disposal may be, as compared with those of which Medicine can avail herself in other countries, our new physiological school may at some future time lay claim to the credit of having at least kept the lamp of science burning in expectation of the coming of a better day.

I have only a few more words to say. All of you know that since we last met on an occasion similar to the present we have lost one of the truest friends and most illustrious ornaments of this college—Dr. Sharpey. I have already told you how the practical teaching of physiology was initiated by him. I wish to give those of you who never saw him some idea of what he was, and at the same time to give expression to my own feeling of veneration for his memory—of regret that we have lost him.

I cannot give you a true notion of Dr. Sharpey's scientific character without referring to the share which he took in the development of the science which he taught here. In 1836, when he was appointed professor, the sum of knowledge which existed as to the mechanical and chemical processes of the animal body was a mere rudiment of that which we now possess; but during the twenty years which followed that date, its growth was like that of infancy—it was more rapid beyond comparison than it had ever been at any previous period, more rapid than it can be again. This growth began with the revelation of the previously unknown organisation of plants and animals, which was the fruit of the discoveries of Schwann, and of the anatomical researches of Henle, Bowman, and Sharpey himself, and closed with the achieve-

ments in vital physics and chemistry of Helmholtz, of Ludwig, of Bernard.

The invitation of Dr. Sharpey to take a position so important as the chair of Anatomy and Physiology in this place had an influence in promoting the study of what afterwards came to be called Physiological Anatomy, which could hardly be exaggerated. The subject was new, and an expositor was wanted, and he was singularly fitted for the position which he was called to occupy both by nature and by education. By nature he was a man of extraordinary vigour, both mental and bodily, and at the time of his advent to London was in the strength of his youth with the best years of his life before him. He had prepared himself for the work of teaching by devoting several years to the study of anatomy in the schools of France, Italy, and Germany, and had cultivated his mind to the utmost by intercourse with the most active intellects of his time. He had already acquired a great reputation as an anatomist and comparative anatomist, and had an unrivalled acquaintance both with the literature of his time and with the writings of the older anatomists and physiologists, as well as with the historical development of the subject he was about to teach.

A man possessed of so wide a range of knowledge and endowed with so remarkable a judgment as he was, could not fail to be a great teacher. The excellence of his teaching consisted in its being the spontaneous outflow of a richly furnished intellect. To this were added other more personal qualities, which rendered it specially adapted to its purpose and to the audience whom he had to address. No man more thoroughly sympathised with the student or understood more instinctively his requirements; and consequently his lectures, while they satisfied those who sought for full knowledge, set forth the subjects taught with such clearness that even the least capable found it difficult to avoid learning something.

I must not dwell longer on the intellectual endowment of the dear friend whom we have lost. We shall not see his face or hear his voice again. We shall no longer have the opportunity of drawing for information on the exhaustless stores of his memory, or of profiting by his sage counsels. But to those of us who knew the moral excellences of his character, his inflexible devotion to duty, his perfect truthfulness, his unwillingness to think evil of others, his ready sympathy with every noble and generous sentiment—his bright example, though he is gone, will still speak. Let us strive to follow it.

## An Address

DELIVERED AT

### KING'S COLLEGE

*After the Distribution of Scholarships and Prizes at the Opening of the Winter Session,*

By GEORGE JOHNSON, M.D., F.R.S.,

PROFESSOR OF CLINICAL MEDICINE AT, AND SENIOR PHYSICIAN TO, KING'S COLLEGE HOSPITAL.

LADIES AND GENTLEMEN,—The first duty that I have to perform in addressing you is a very pleasant one: I have to offer my hearty congratulations to those students who have been successful in obtaining scholarships, prizes, and other marks of distinction. Although many years have elapsed since the last occasion on which, in this room, I was amongst those to whom similar honours were awarded, I retain a lively recollection of the pleasure experienced while receiving them in the presence of near relations and friends. I can, therefore, very heartily sympathise with you on this occasion.

And now, exercising the privilege usually granted to advancing years, let me offer you a few words of advice. I beg of you not to consider these scholarships and prizes as the end and object of your labours; rather they are to be looked upon as incentives to yet further and more prolonged exertion. By the success which you have hitherto achieved you have shown that you possess an amount of intellectual capacity and of industry from which in after years much more will be expected; and in proportion to the pleasure and satisfaction which your friends have experienced in your

present success and distinction would be their disappointment and sorrow if in the future any of you should, unhappily, fall short of the hopeful anticipations which your past career has excited. If you go on as you have begun, persevering in habits of steady conscientious industry, a more or less prosperous and useful career may confidently be predicted for you. Our experience of the past leads us to anticipate that men who have distinguished themselves, as some amongst you have done, will rise to eminence in their profession—that they will not only become skilful, trustworthy, and therefore trusted practitioners, but that they will become teachers and leaders. It may fall to the lot of some of you to be enabled, by diligent and sagacious research, to throw light upon some of the as yet obscure phenomena and processes of disease, to advance our knowledge of the causes of sickness and mortality, and to add to and improve the means of prevention or of cure. If such should, happily, be the result of your labours, you will have the satisfaction of feeling that, not only have you gained deserved credit for yourselves and for your school, but you have conferred a lasting benefit upon mankind.

I may assume that there are some present who have been unsuccessful competitors for prizes or other distinction as there are unquestionably some who have not been competitors at all. To each of these classes I have a few words to say. My experience has taught me that there are some men of intelligence and steady industry, who, apparently from a want of the power to arrange their ideas in a methodical order, or to give a clear expression to them, fail in competitive examinations. Now while we cannot but condole with such men in their disappointment, we may encourage them to persevere by reminding them that the labour of preparing for even an unsuccessful competition is rewarded by an increase of knowledge, and that the facility of quickly arranging ideas and giving expression to them in a written or a *viva voce* examination is often much increased by practice. Let them not, therefore, despair of greater success in the future than they have met with in the past.

With regard to those students who refrain entirely from competition, while there are some who perhaps want the ability, and others who lack the industry which is requisite to ensure success, there are some men of unquestionable ability and industry to whom competitive examinations appear to be distasteful. I have known and could now point to some of these quite exceptional men who have proved their ability and their industry by the attainment of great success, as able and skilful practitioners, and even eminent teachers, but who never, during their student career, competed for a prize or a scholarship. Most of this class of non-competitors whom I have known have been men of ample means, for whom even the most valuable of our scholarships have had little or no pecuniary attraction; but for those less favourably circumstanced, whose friends may perhaps find a difficulty in defraying the expense of a complete and prolonged medical education, it becomes a positive duty to endeavour to lighten the burden of parents or guardians by a diligent effort to win a scholarship.

And here again I could point to several instances in which the gaining of our senior scholarship, with perhaps another from the University of London (an object of ambition which I trust that many of you are keeping in view), has enabled a persevering student to prolong his education in London, and ultimately to secure a permanent position here, which without such early pecuniary fruit of his own industry would have been unattainable.

I am not unmindful of the fact that for the first time, at a distribution of prizes in this College, we have here present a number of young men who are on the threshold of their medical studies; and to them in particular I now desire to address a few words of welcome, of counsel, and of encouragement.

No one who is interested in the career of a medical student can contemplate the weighty consequences to himself, to his family and friends, and lastly to mankind, of the manner in which he spends the four or five years during which he has to prepare himself for the practice of his profession, without a feeling of anxiety. And this anxiety is not lessened by the consideration that in this great city young men are exposed to many temptations, more or less perilous, the tendency of which, if yielded to, is to impair their moral and intellectual powers, and so to hamper and hinder them in the prosecution of their studies. The best safeguard against these dangers, next to those high principles and that sense of duty which we may hope that all have had instilled into

them at home and at school, consists, I believe, in an immediate and persevering application to the work prescribed for them by the curriculum.

The student who has arrived at that stage of his progress in which he has learnt to take delight in his work is happily safeguarded against many dangers that beset the idler, for whom it is proverbial that the author of all evil is always preparing some work of mischief.

The subjects to which your attention will first be directed are anatomy, physiology, and chemistry, and in order to obtain such a knowledge of these large and complex sciences as will form a secure basis for that acquaintance with disease and its preventive and curative treatment, which is the final and supreme stage of your medical studies, you will need to devote to them all the time, the attention, and the ability that you have at your command. The ablest and the most gifted amongst you will not find that he has any time to spare if he sets himself in earnest to master the many details and the underlying principles and laws of these extensive and important sciences; nor, on the other hand, need the duller and least brilliant student despair of a large measure of success if only he has inherited or acquired that essential qualification for the highest success in any great or useful calling—a habit of steady, persevering industry.

To borrow an illustration from the now veteran Thomas Carlyle, "All work of man is as the swimmer's. A waste ocean threatens to devour him; if he front it not bravely it will keep its word. By incessant wise defiance of it, lusty rebuke and buffet of it, behold how it loyally supports him—bears him as its conqueror along."

Every teacher of experience could point to numerous illustrations of the lesson inculcated by the fable of the hare and the tortoise—I mean examples of the brilliant and apparently highly-gifted idler being surpassed in the race of life by the comparatively dull but plodding and steadily industrious man. It would, of course, be unreasonable and absurd to deny that individuals and races of men differ immeasurably in the kind and degree of their inherited or acquired mental powers, but my argument is that without industry the most brilliant man will fail in any high pursuit, and that the greatest works of so-called genius have not been accomplished without great labour—*nil sine magno labore natura mortalibus dedit*. The skilful artist who, with a few apparently easy and careless touches of the pencil, puts upon his canvas a beautiful scene of nature or a striking likeness of a living human face, has acquired this marvellous power of rapid execution only by long-continued study and by the diligent practice of the mechanical details of his art.

Again, the musician who thrills and delights an audience by his brilliant performance has obtained this admirable facility, this consummate skill, by years of laborious study and practice. An eminently-skilled musician must no doubt possess an innate highly and delicately-organised brain and nervous system. I have had frequent opportunities of observing the extreme nervous sensibility of eminent musicians,—a sensibility which, with a capacity for the intense enjoyment of their delightful art, carries with it also an exceptional liability to acute suffering. One phase of this subject is strikingly and amusingly illustrated by Hogarth's picture of "the enraged musician," who is represented as driven to distraction by the discord of street noises.

So of the poet, if the saying *nascitur non fit* be true, he must be born and cannot be made a poet; it is equally true that the greatest and most successful efforts of poetic genius are the results of the prolonged and diligent culture of inborn intellectual power. It has been said of Milton by an eloquent Hunterian orator<sup>1</sup> that if in the full maturity of his genius he—

"fed on thoughts that voluntary move  
Harmonious numbers."

He had acquired this power, he had earned this facility, this spontaneous activity, by the industry with which in early life he had accustomed himself

"to build the lofty rhyme."

It would not be difficult to prove by numerous extracts from the dramatic works of Shakespeare that the most admirable productions of his unrivalled genius are the result of careful painstaking study and elaboration. As an illustration I select one passage, which has a medical as well as a literary interest. You are aware that there exists an early version

<sup>1</sup> Hunterian Oration, by Joseph Henry Green F.R.S.

of the play of "Hamlet," published in 1603, and that this was followed by a later edition, "enlarged," as the title-page states, "to almost as much again as it was." A comparison of the two editions affords many interesting illustrations of the manner in which the great dramatist had elaborated and improved upon his original rough sketch. The passage to which I refer is that in which Polonius describes the origin and progress of Hamlet's supposed madness. In the earlier edition Polonius says—

"He straightway grew into a melancholy,  
From that into a fast, then into distraction,  
Then into a sadness; from that into a madness,  
And so, by continuance and weakness of the brain,  
Into this frenzy which now possesses him."

In the revised edition we have the well-known lines :—

"And he repulsed, a short tale to make,  
Fell into a sadness, then into a fast,  
Thence to a watch, thence into a weakness,  
Thence to a lightness, and by this declension  
Into the madness wherein now he raves,  
And we all wail for."

The improvement in this later version of the passage, the result of careful observation and study, is very obvious and striking. In the revised work such repetitions as "melancholy" and "sadness," "frenzy" and "madness," are avoided, and we have condensed into a few lines the perfectly correct medical doctrine that a great sorrow often causes in succession sadness, loss of appetite, wakefulness, weakness, "lightness," or slight and transient delirium, and at length raving madness; these phenomena occurring, as our daily experience teaches us, exactly in the order in which they are mentioned by Polonius.

More than one lecture might be given, and much has been written and published to illustrate Shakespeare's medical knowledge, more especially his unequalled mastery and marvellous exposition of psychological phenomena. Without doubt his powers of observation and imagination, and his command of language were incomparably great, but even these vast mental endowments would not have enabled him to produce such masterpieces of dramatic art as "Macbeth," "Othello," "Lear," and "Hamlet," without an industrious use of his unequalled intellectual powers.

If then it be true, as it appears to be, that for the attainment of success in the practice of the so-called *fine arts* of painting, music, and poetry, diligent study, and persevering industry are requisite, they are not less so for the acquirement of that scientific knowledge and practical skill which are essential for the successful practice of medicine and surgery.

The skill and the manual dexterity which enable the surgeon to perform successfully a difficult operation, guiding his knife safely amidst delicate tissues and vital organs, are not to be acquired without prolonged study and much practice. Nor, again, is that knowledge of the interdependence, or physiological relationship between various tissues and organs—their action and reaction upon each other in health and in disease—which often enables an experienced observer to base a diagnosis on a single phenomenon—it may be the character of the pulse, the visible throbbing of an artery, a patch of degeneration in the interior of the eye, the sound of the cough or of the voice, or the expression of the countenance—such knowledge, I say, can be obtained only by long and patient clinical observation and research.

One piece of advice I am anxious to impress upon you, which is this : whatever line of practice you may hereafter—whether by natural taste, inherited opportunities, or other favouring circumstances—be led to adopt, whether you become consulting physicians or surgeons, or so-called general practitioners, or whether you take up some such important special department of practice as obstetrics, the care and treatment of the insane, or ophthalmic or aural surgery, it would be an error and evil for you too early in your professional career to devote yourselves to the exclusive study and practice of any one department of medicine or surgery. The more general is your knowledge of disease, the more thoroughly you have become practically skilled in the use of every means of physical diagnosis, the better qualified will you be hereafter to undertake any special department of practice.

As a physician I gratefully acknowledge my obligation to my surgical colleagues for the lessons they are continually teaching me; but more especially I am indebted to my old master and friend and colleague, the late Sir William Fergusson, under whom I had the advantage to serve as dresser and house-surgeon. Then, on the other hand, I

venture to say that the most eminent and skilful of surgeons finds himself rather helped than hindered in his daily practice by an acquaintance with many details which are usually considered to come within the province of the physician.

I have often said, and I repeat now, that some of the best practitioners whom I have the happiness to know are what are called "general practitioners"—men equally at their ease and equally skilled in setting a broken bone or conducting a patient safely through the crisis of a fever. These men are usually the confidential family advisers in all emergencies; and while pre-eminently the friends of the poor, often associating on equal terms, as their intelligence and culture entitle them to do, with the best families in their neighbourhood. There are few positions in the profession of greater honour and usefulness than this.

Then, *per contra*, some of the worst and least trustworthy practitioners, although perhaps highly patronised by an indiscriminating public, have been men with an unmerited reputation for some small speciality. A large proportion of the public adopt and act upon opinions with regard to special departments of practice the exact opposite to those which we believe to be reasonable and right. Instead of assuming, as we do, that for a complete knowledge and successful treatment of any one class of disease a general acquaintance with the whole range of pathology is requisite, they appear to suppose that skill in one department of practice implies ignorance of every other. As an illustration of this, the late Dr. Latham related the following anecdote to Sir Thomas Watson, from whom I heard it :—

Dr. Latham, as many of you are aware, was a very eminent, learned, and accomplished physician of St. Bartholomew's Hospital, but he happened to have published more on diseases of the heart and lungs than on any other medical subject. A patient of his, who had recently recovered from some pulmonary affection, one day addressed him thus : "I feel that as regards my lungs I am quite well, and now I think of going to consult Dr. Watson about my general health." To which Dr. Latham replied : "Yes, I see; in your estimation, then, Dr. Watson is an 'architect,' and me, I suppose, you look upon as a bell-hanger." It is our wish—the wish of myself and my colleagues—that all of you who are now entering upon, or who have already made some progress with your medical training here, should aim at qualifying yourselves to be architects and not mere bell-hangers in the profession.

In the study as in the practice of any profession or calling it is well to keep steadily in view a high standard of excellence, and, by continued effort, to endeavour to attain it.

"We live by admiration, hope, and love,  
And, even as these are well and wisely fixed,  
In dignity of being we ascend."

In our great metropolitan cathedral you have seen or you may see the fine and impressive monument to Nelson, in which Britannia is represented pointing the upward gaze of two young midshipmen to the great admiral as a model to be admired and imitated. In like manner, and with a like purpose, let me direct your attention to a former professor of medicine in this college as happily a living example of a truly great physician. I refer, of course, to Sir Thomas Watson, as a man not only learned in the science and skilful in the practice of his profession, but a gentleman in the fullest sense of the term—remarkable not less for the courtesy and consideration uniformly shown to his professional brethren than for the care and skill bestowed upon his patients. His published lectures on the Principles and Practice of Physic have for the last forty years continued to instruct by their practical wisdom, and to charm by their lucid and scholarly style. And now at an age of more than fourscore years he enjoys the well-earned and cheerfully rendered respect and esteem of the entire profession, and of all classes of the public from the Sovereign downwards. He possesses "that which should accompany old age, honour, love, obedience, troops of friends." That, gentlemen, is the high standard of excellence towards which I would urge you all to strive, and to which it may be that happily for yourselves and for mankind some of you may attain.

And now I propose to conclude this brief address with a quotation from the discourse by which Sir Thomas Watson prefaces his course of lectures on medicine. The passage which I am about to quote will be familiar to many of you, but to most of the younger part of my audience it will probably be new, and it may serve, by its eloquent and impressive language, to convey to them a just idea of the real

nobility of our profession and of the principles by which we should be guided in the study and practice of it. In the earlier part of the lecture the professor sketches the general plan and outline of his course, he indicates the purpose and the limitation of teaching by lectures, and after referring to the duties and responsibilities respectively of the teacher and of the student, he concludes his lecture thus :—

“But with all its responsibilities, both for teacher and for learner, the profession which you and I, gentlemen, have chosen, or which circumstances have prescribed to us, is a noble profession, and worthy the devotion of a lifetime. If you fit yourselves now for its high functions, and pursue it hereafter in earnestness and truth, it will probably conduct you to an honourable competence, and it will assuredly prove a salutary school of mental and of moral discipline. Trials, no doubt, and difficulties, belong to it, but it has also privileges and immunities peculiar to itself. Affording ample scope and exercise for the intellect, it is conversant with objects that tend to elevate the thoughts, to temper the feelings, and to touch the heart. I have already reminded you how it brings beneath our minute and daily notice that most remarkable portion of matter with which the human spirit is here mysteriously tabernacled, and which, apart from that singularly interesting thought, awakens increasing wonder and admiration the more minutely we investigate its marvellous construction. The sad varieties of human pain and weakness with which our daily vocation is familiar should rebuke our pride, while they quicken our charity. To us are entrusted in more than ordinary measure, opportunities of doing good to our fellow-creatures, of showing love towards our neighbour. Let us beware how we idly neglect, or selfishly abuse, a stewardship so precious, yet so weighty. The profession of medicine having for its end the common good of mankind, knows nothing of national enmities, of political strife, of sectarian divisions. Disease and pain the sole conditions of its ministry, it is disquieted by no misgivings about the justice or the honesty of its client's cause, but dispenses its peculiar benefits, without stint or scruple, to men of every country and party, and rank and religion, and to men of no religion at all; and like the quality of mercy, of which it is the favourite handmaid, ‘It blesseth him that gives, and him that takes,’ reading continually to our own hearts the most impressive lessons, the most solemn warnings.

“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.

“We see, too, the uses of these judgments, which are mercifully designed to recall men from the strong allurements of sense and the slumber of temporal prosperity, teaching that it is good for us to be sometimes afflicted. Familiar with death in its manifold shapes, witnessing from day to day its sudden stroke, its slow but open siege, its secret and insidious approaches, we are not permitted to be unmindful that our own stay also is brief and uncertain, our opportunities fleeting, and our time, even when longest, very short if measured by our moral wants and intellectual cravings.

“Surely, gentlemen, you will not dare without adequate and earnest preparation to embark in a calling such as this, so capable of good if rightly used, so full of peril to yourselves and to mankind if administered ignorantly or unfaithfully. And even when you have made it, as you may, the means of continual self-improvement and the channel of health and of ease to those around you, let not the influence which you will thus obtain beget an unbecoming spirit of presumption; but remember that in your most successful efforts you are but the honoured instruments of a mightier Power—that, after all, ‘it is God who healeth our diseases and redeemeth our life from destruction.’”

MEDICO-CHIRURGICAL SOCIETY OF GLASGOW.—The society met on the 1st inst., for the election of office-bearers for the session 1880-81. The following is the result:—President: Dr. George Buchanan. Vice-Presidents: Dr. D. Taylor (Paisley), Dr. J. B. Russell. Council: Dr. Alex. Robertson, Dr. A. L. Kelly, Dr. Bruce Goff (Bothwell), Dr. Geo. Willis (Baillieston), Dr. Geo. Mather, Dr. H. C. Cameron, Dr. Robert Forrest, Dr. Lapraik. Secretaries: Dr. Joseph Coats, Dr. W. L. Reid. Treasurer: Dr. Hugh Thomson.

## ABSTRACT

OF

## Introductory Lecture

ON THE

## EDUCATION OF THE GENERAL PRACTITIONER.

*Delivered at St. George's Hospital, Oct, 1st, 1880,*

By JOHN CAVAFY, M.D., F.R.C.P.,

ASSISTANT-PHYSICIAN TO THE HOSPITAL.

AFTER some preliminary remarks on various changes in the staff, especially the loss sustained by the resignation of Mr. Pollock, the lecturer proceeded as follows :—

I have endeavoured to consider on what subject your attention may for a short time be occupied, without being fatigued or repelled; and I have chosen the old topic of medical education. It is of the greatest importance to all of us, and of perennial interest; and though it is as old as the medical schools in which it is carried out (or rather as old as medicine itself), it is as new as the latest modification in teaching and examination which the exigencies of modern times have required.

Premising that what I am about to say is not intended to have any reference to the training required of candidates for university degrees, I purpose to consider, shortly, what form of education should be given, and what subjects should be taught to those who intend to practise the whole of the medical art—i.e., general practitioners. To this class, so far as knowledge goes, I hope we all belong, whether we be physicians, surgeons, or specialists. For there is now a far closer connexion, a greater approach to unity, between the various branches of our profession than appears to have obtained in the good old times. The surgeon of the present day is not simply the possessor of a special form of manual dexterity; he is rather a physician who operates. Again, a physician cannot, I hope, be defined as a practitioner who is ignorant of surgery; while those who ultimately confine their practice to special departments will be the first to acknowledge that this limitation would be next to impossible, were they not previously possessed of a wide general knowledge of their profession. In short, the science and art of medicine are logically one and indivisible; and there is no strict line of demarcation between the various subdivisions which have become established as matters of social convenience.

The general practitioner, who possesses the advantage of being concerned with the whole of his profession, may fairly be taken to be the typical “doctor” of our day. He has developed rapidly within a comparatively recent period from the imperfect or larval condition of the old apothecary; and although he may be said now to have passed through his last metamorphosis and to be a complete imago, as it were, traces of the earlier and less perfect state (such as the selling of medicines) may be still occasionally observed in him. Both his general and professional education, however, have improved enormously, and there can be no doubt that so far as social position and influence are concerned, the practitioner of our own day holds a far higher place than that of the old apothecary, from whom he has sprung. We now find among general practitioners men of the highest general and professional cultivation, often possessing university degrees, sometimes men of profound learning; members, in short, of a liberal profession.

In the old days, when general and professional education were not attainable with the same facility nor to the same degree as now, it might fairly be said that the apothecary was a nondescript tradesman. His surgery was called “the doctor's shop,” a term which probably survives in remote country districts. In this shop knowledge, it is true, was one of the commodities sold to the public; but pills and potions, powders, plasters, and ointments, “doctor's stuff,” in short, formed the chief portion of the stock-in-trade. His knowledge, however, if limited, was often excellent of its kind. It was gained during a long apprenticeship, followed by a brief period devoted to the process known as “walking